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ABSTRACT

This book is designed to provide related information to students in food trades. The material is presented in a series of brief paragraphs intended to stimulate discussion or elaboration of the information presented. Each page contains drawings to illustrate the information given. The book addresses the following subjects: (1) sanitation, health, and personal hygiene, (2) safety, (3) organization of commercial kitchens, (4) a glance at the history of food and food processing, (5) cooking tools and equipment, (6) vegetables, (7) dairy products, (8) other cooking staples, (9) herbs, spices, and condiments, (10) meats, (11) poultry, (12) fish, and (13) shellfish. The materials contain definitions, tips, guidelines, explanations, and general and specific information related to food and food preparation. An index is included. (CSS)

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State of New Jersey
Department of Education
Division of Vocational Education

LET'S TALK ABOUT FOODS

FOOD FACTS FOR THE COMMERCIAL KITCHEN

Pierre Caillault, Instructor

Ralston E. Dorrell, Director
Atlantic County Area Vocational-Technical School

CE 018 325

Vocational-Technical
Curriculum Laboratory
Rutgers – The State University
Building 4103 – Kilmer Campus
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To The Teacher

This book is designed to provide related information to students in food trades. It is intended literally to be "talked over" by students and teacher.

The material is presented as a series of brief paragraphs, each one of which can be the springboard for discussion or elaboration of the information presented. The drawings (almost all of which were done by Matthew O'Neill, staff artist of the Curriculum Laboratory) should offer additional opportunities for comment and thus enhance and reinforce the students' learning.

Not every appropriate topic has been covered in this book. The remainder await a future opportunity.

It is hoped that each student may be given a copy of the book to keep as a reference in the future. Note that the detailed index should make it fairly easy to locate a particular item of information.

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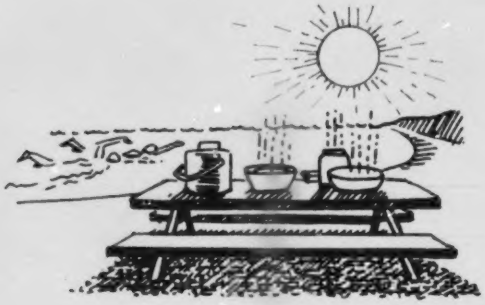
Sanitation, Health, and Personal Hygiene

Keeping Food Safe To Eat

Sanitation, health, and personal hygiene are topics of utmost importance to students in food service programs.

Sanitation rules should be observed constantly *to avoid contamination* of foods.

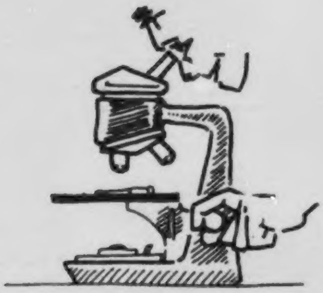


The consumption of contaminated foods can be the *cause of serious and even fatal illness.*

Sanitation in the food service industry is *regulated and controlled* by the U.S. Public Health Service and other State, county, and local agencies.

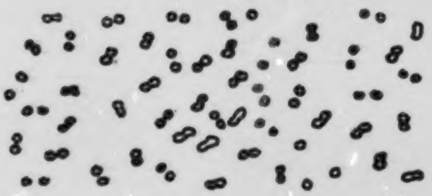
Awareness of the importance of sanitation, pride in oneself and one's own work, together with common sense, should *remove any risk* of health hazards to the consumer of the prepared foods.

Contamination of foodstuff is usually due to the presence and rapid growth of *microorganisms called bacteria.*



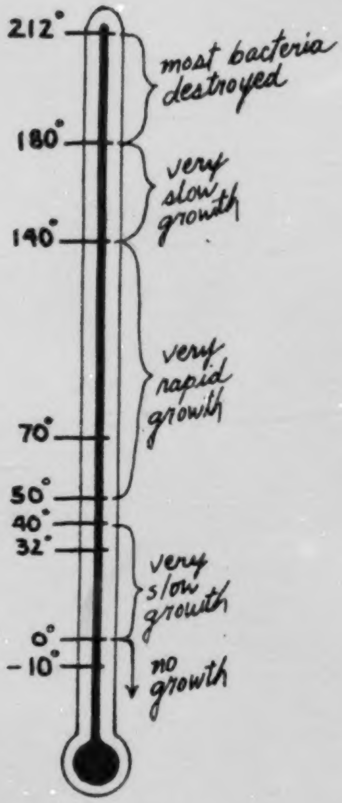
Bacteria are air-borne, living microorganisms invisible to the naked eye but *present everywhere.* There are many different types.

The main culprits in food contamination are the bacteria called *salmonella, staphylococcus,* and *botulinum.*



In order to grow, bacteria need *food, moisture, and warmth.*

Under favorable conditions (for them), bacteria will grow at an incredible rate, doubling in number every 20 minutes.



A single bacterium can multiply into a *billion bacteria* in the course of 10 hours.

Bacteria grow *slowly* at temperatures ranging from *40°F. down to 0°F.* Their growth will stop completely at temperatures below 0°F.

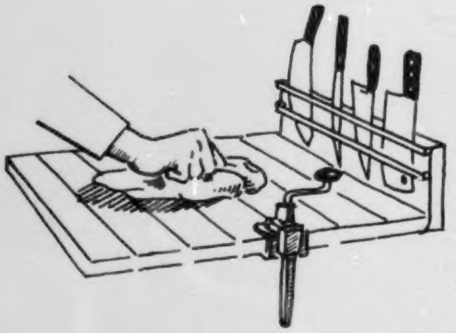
Bacteria grow best at temperatures ranging from 50°F. to 140°F.

The growth of bacteria will *decrease above the temperature of 140°F.,* and most bacteria will be destroyed when temperature reaches 180°F.

Bacteria will also be *killed by chemicals* such as iodine and chlorine. These chemicals are used in a variety of institutional cleaning and washing compounds.

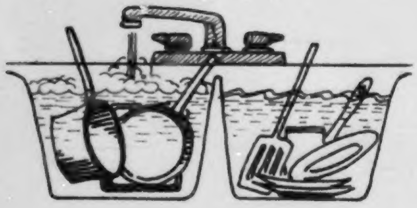
General cleanliness and good house-cleaning are the first rules to be applied in order to prevent food contamination in a public food establishment.

Observing sanitation rules is the *constant responsibility of EVERYONE* in the food service industry.



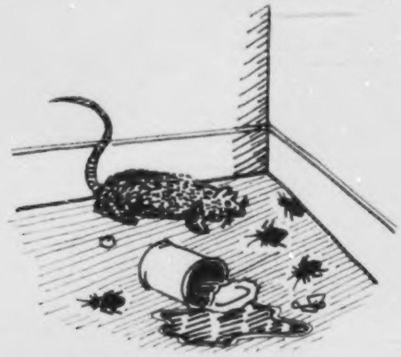
Working surfaces should be washed often with proper sterilizing solutions.

Walk-in and reach-in refrigerators should be cleaned regularly. They should not be overcrowded.



Pots, pans, tools, and dishes should be scrubbed in hot water and recommended detergent and rinsed in 180°F. water.

Food containers *should not be stored directly on the floor,* since this would make it impossible or very difficult to properly clean the floor.



Dirt and moisture, especially *in dark places*, will attract roaches and small rodents (rats and mice).

Windows and doors should be screened to keep flies and other insects from entering the food service areas.

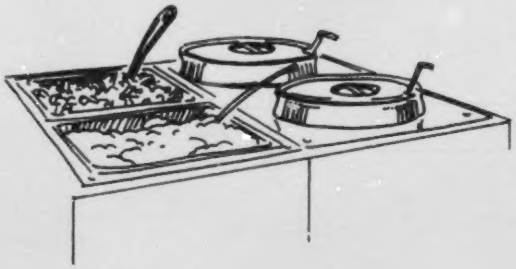
Stationary equipment and machinery should be taken apart for thorough washing after each use.

Fresh fruits and vegetables, poultry, and fish *should always be washed* at some time before serving. Poultry and fish are best wiped with a damp cloth rather than being soaked in water, which causes a loss of nutrients.

All food should be kept covered, even in the refrigerator.

Garbage should be disposed of as soon as possible.

Food should be handled as little as possible to reduce the risk of contamination by contact.



Cooked food prepared in advance (soups, gravies, stews, etc.) *should be kept at* a temperature of *at least 140°F.* until serving time by the use of a "bain-marie" or steam table.

Bain-maries or steam tables must *not be used to reheat* refrigerated leftovers.

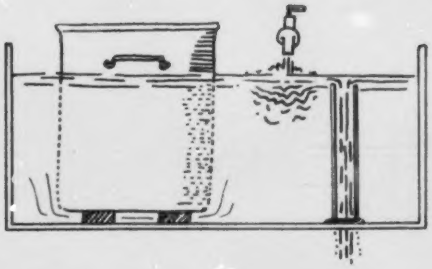
Leftover food, even kept under refrigeration, *should be brought again to* a temperature of *at least 212°* F. (boiling) in order to destroy harmful bacteria.

No food should be allowed to remain at temperatures between 40° F. and 140° F.

An old saying among cooks is, "If it's to be *cold*, keep it *very cold;* if it's to be *hot*, keep it *very hot*."

Submitting foods to a temperature of *145° for a period of 30 minutes* will destroy most bacteria that can cause disease in humans. This process, called pasteurization, has the advantage of not destroying most vitamins and nutrients. There are other methods of pasteurizing foods also.

Cooling of cooked foods should be as rapid as possible and should be followed by immediate refrigeration.

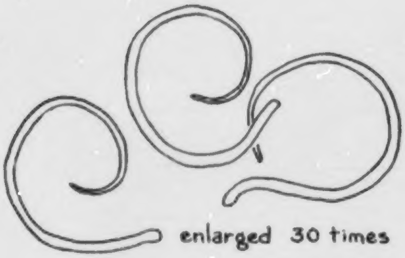


Cooling can be speeded by putting pots in cold running water, by using shallow pans rather than deep ones, and by not stacking food items.

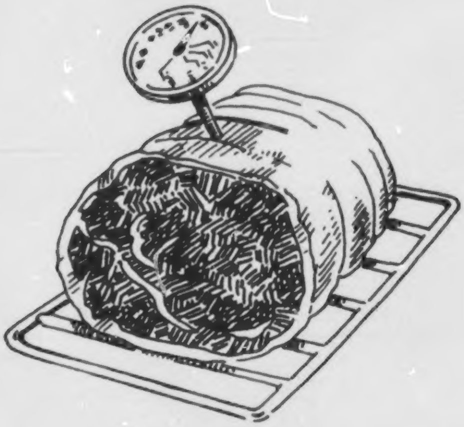
Leftovers are *always dangerous items to handle.* Besides having a changed appearance, texture and taste, there is always the possibility of contamination. This makes it necessary to use extreme caution in handling and using leftovers.

An old kitchen rule states: *"Do not serve to others what you wouldn't eat yourself."* Although not really precise enough, this statement is certainly a valid one.

Food should not be left in the dangerous temperature range (40°F. – 140°F.) for more than an hour, and then only if absolutely necessary.



Pork meat, and also meat of some game animals, can be infected by a kind of little worm called *trichina,* which is a *health hazard* to human beings.



Pork meat should always be cooked thoroughly – to the well-done state – to prevent getting the dangerous muscle disease called trichinosis.

Health and Personal Hygiene

Good health is for many reasons *a priceless* asset. It is also a *must* for food service employees. Dangerous microbes may be transmitted to other people by an employee who has a contagious disease.

Coughing and sneezing, while inevitable at times, should still be regarded as a serious health hazard to others. Plain common sense will dictate the proper things to do or avoid in such cases.

Our *personal appearance* influences other people's judgment of ourselves and their willingness to accept us or not as a friend or as an employee.

Many capable workers are *denied employment opportunities* due to their lack of concern for their personal appearance.

A well-groomed individual, neatly and tastefully dressed, will convey a certain maturity and make a *favorable impression* on others.

Cooks are very proud of their *uniforms,* and nothing is more impressive than the sight of a crew of cooks working in a clean kitchen in their white coats and crisp white hats.

It is a true fact that a cook of neat and clean appearance will also be neat and clean in his/her work.

A person in good health, caring for his/her personal appearance and meticulous about personal hygiene, will enjoy *a priceless feeling of well-being.*

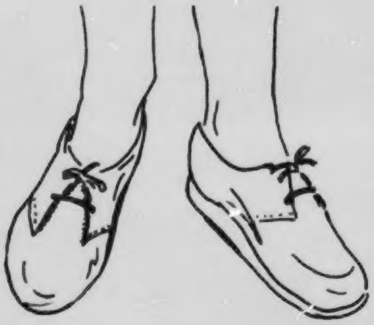
Hands and nails should be cleaned often with soap and water. Nails should be kept trimmed short.

It is of course a must to wash your hands before leaving the washroom.

Hair should be kept reasonably short and well combed and should be covered at all times with a hat or hair net.

For obvious reasons, food service employees should always wear *clean uniforms* and also *clean undergarments.*

Offensive body odor can easily be prevented and by all means should be. *Offensive breath* can usually be prevented also.



Shoes are a very important item to food service workers, who have to stay on their feet for long hours at a time. Worn-out shoes are often tiring and may even damage the feet permanently.

Leather shoes are a must in a kitchen. Fabric footwear gives little or no protection from falling objects and spilled hot liquids.

Hands should not be used directly in food. If the use of a hand tool proves impractical at times, the worker should wear plastic gloves.

A cook who spits in a kitchen does not deserve the name of cook.

Each food service employee is expected to maintain his/her *own working area* uncluttered and clean at all times. A clean station is a more comfortable place to work.

In a kitchen, as anywhere else, *being nice to others* will almost surely bring others to be nice to you.

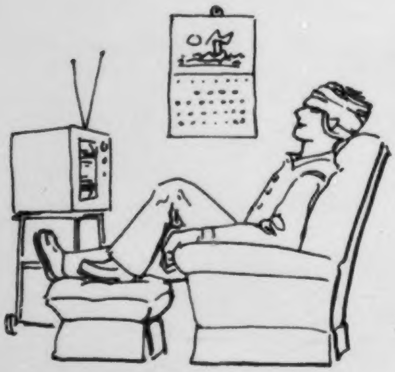
Abusive language should not be tolerated. The use of such language is often an admission of the lack of a good vocabulary.

stay ALERT

Safety

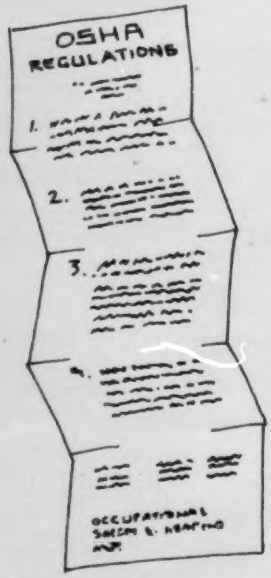
Safety is a major part of every training program.

Safety is the result of *precautions* and *alertness.*



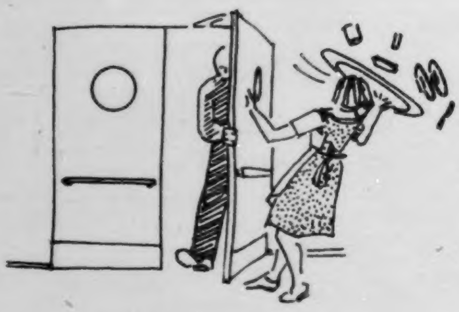
Many – if not all – accidents resulting in injuries *could have been easily avoided.*

Accidents often result in loss of *working time* and hence loss of *money.*



The *Occupational Safety and Health Act of 1970 (OSHA)* was passed into law "to assure safe and healthful working conditions for working men and women."

Employers and employees have the duty to follow the *standards set forth* in the Occupational Safety and Health Act of 1970.

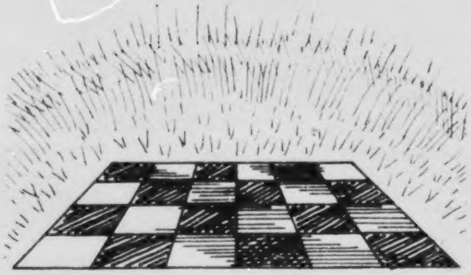


Each employer shall furnish to all employees a place of employment which is *free from recognized hazards* that could cause death or serious physical harm to the employees.

Think!

A safe operation depends largely upon employees who are properly informed and *aware of potential hazards.*

Kitchens are areas of much activity and therefore have a great *potential for accidents* or injuries.

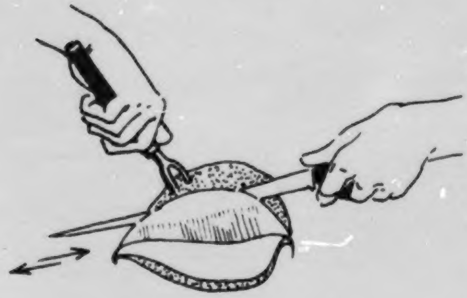


Floors should be kept clean and dry – free of dropped or spilled foods.

Spilled food or broken dishes should be *removed immediately.* Brooms and dustpans or a vacuum cleaner should be used in picking up broken glass, china, and crockery.

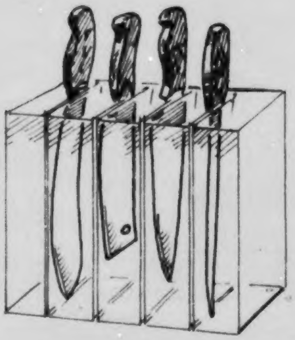
Employees, needless to say, should not engage in *horseplay.*

Proper precautions should be taken when handling *hot pots and pans.* Only mitts, potholders, or *dry* towels should be used.



Knives should not be carried while walking. If it is really necessary to do so, use caution and have knife pointed toward floor.

Knives should be *kept sharp* and used in a back-and-forth, sawing motion. This will take less pressure, and so any accidental cut will probably be less deep.



Knives should be *stored in a neat fashion* in a drawer or protected rack.

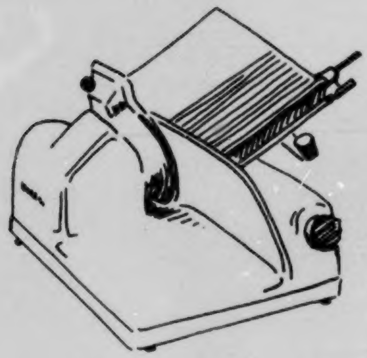
Knives or any other cutting tools should *never be placed on high shelves.*

Do not attempt to catch a falling knife. Instead, a small jump to the side might prevent injury to feet and legs.

Do not gesture with a knife in your hand or use a knife as a direction pointer.

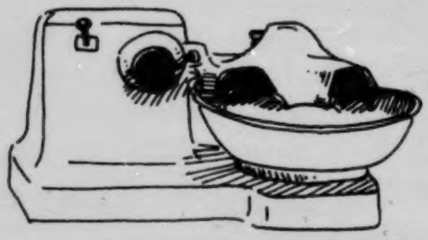
Caution should be constantly exercised in the operation of every *power tool and piece of machinery.* (Slicers, choppers, vertical cutters, meat saws, grinders, etc.)

Before cleaning any piece of electrical equipment, *disconnect the plug from the outlet.*



The guard should always be in place while using the *slicing machine.*

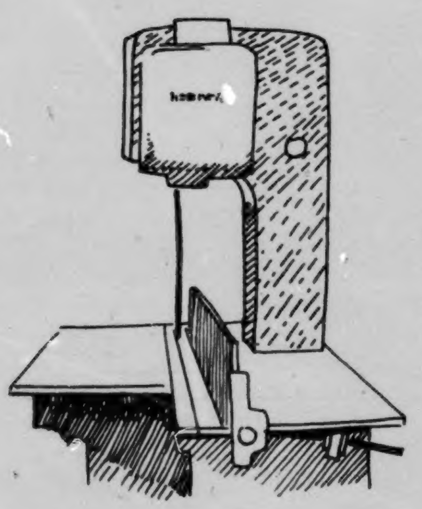
The plunger – not the hand – should be used in feeding the foodstuff into the *grinder.*



The *chopper* (often called "Buffalo") is one of the most dangerous machines in the kitchen. The machine should be inspected before each use to see that all the different parts are in their correct places.

Under *no* circumstances should one try to reach into the *revolving bowl* of the chopper while the machine is working.

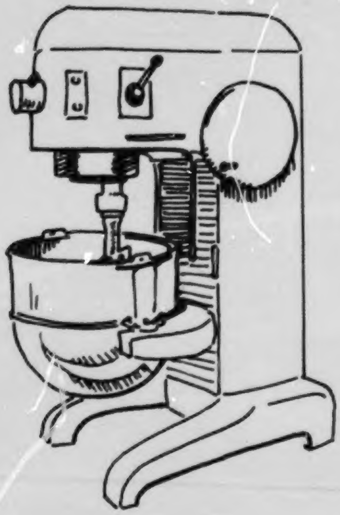
The chopper must be *switched off* before emptying the bowl.



Only well-trained employees should be allowed to use the *power meat saw* without supervision.

While cleaning the power meat saw, extreme care should be taken while *handling the saw blade.*

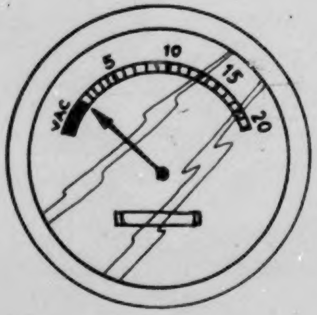
When using a *vertical cutter,* do not open the lid before the blade comes to a complete stop. A slight vibration will be felt until the blade stops.



Before starting a *mixer*, make sure the bowl is properly secured in its right place, and check the position of the gear lever.

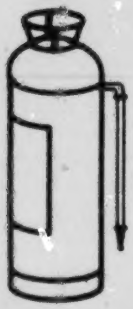
While using a mixer, always *stop the machine* before attempting to scrape down the sides of the bowl.

Gas ovens, gas burners, gas broilers, gas Fryolators, and gas toasters are potentially very dangerous. There could be an accumulation of gas escaping from a defective pilot light or from a jet left open without flame.



Doors of *pressure cookers* – steamers – (although often designed with several safety features) should be opened slowly. There could be an unknown malfunction which prevents the internal steam pressure from lowering enough. If the steam is suddenly released around the door, it could cause very serious face and arm burns.

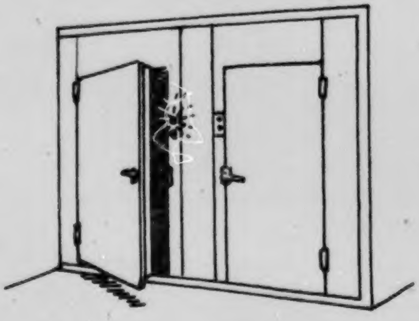
Small fires can usually be extinguished by throwing baking soda on them.



Every employee in a food service establishment should know the *location of the fire extinguishers* and their operation.

Do not try to fight an expanding fire. Call the local fire department at once.

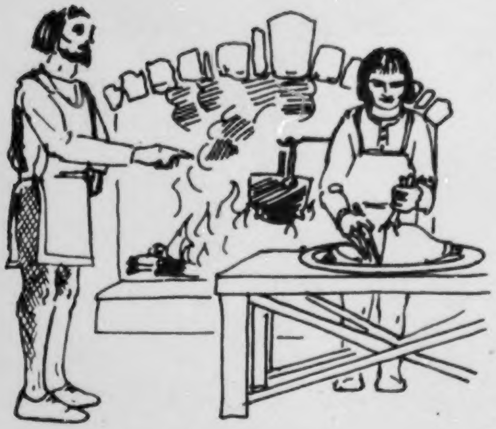
Lifting too heavy a weight is the cause of many back injuries and ruptures (hernias). Kitchen hand trucks, dollies, and utility carts should be used to move heavy loads.



Never lock *a walk-in freezer* (or walk-in refrigerator) without first making sure that nobody is in it.

If you notice the *malfunction* of any piece of equipment or machinery, report it promptly to a supervisor.

Organization of Commercial Kitchens



The *origin of commercial food catering* is not fully known but, in Europe, it no doubt dates back several centuries.

The *operation of the commercial kitchens* of long ago was very different from the operation of our modern kitchens. One thing they had in common, though – then as now, commercial cooking was done mainly by men rather than women. (As the professions become more and more open to women, opportunities for women chefs will surely expand.)

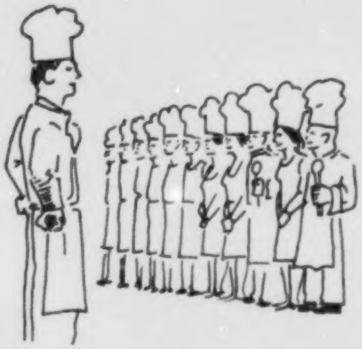
Food production in large commercial kitchens *became more organized* in the late 18th century and led to the present system. For this system a famous French chef – Escoffier – is usually given credit.

Auguste Escoffier, (1847 – 1935) understood that the *specialization* of each cook would result in a more efficient team.

The *composition of a cook's "brigade"* (French for "crew" when referring to food workers) depends upon the nature of the food service establishment.

Small restaurant kitchens are often operated by a chef assisted by a broiler cook, a fry cook, and a pantry helper.

Larger restaurants will employ a working chef, a night chef, a sauce cook, a broiler cook, a fry cook, a cold-meat person, and a pantry helper.



Large hotel kitchens are usually staffed with a complete brigade, including an executive chef, a sous-chef (assistant chef), a night chef, a sauce cook, a garde-manger (cold-meat person), a broiler cook, a fry cook, a soup cook, a vegetable cook, a roast cook, a relief cook ("tournant" in French) and a pantry helper. Each of these specialized employees may be assisted by one or more helpers of varied experience.

Baked goods are often produced on the premises in large hotels and restaurants. These require the services of pastry chefs, pastry cooks, bakers, and – less often – ice-cream makers and confectioners.

In large hotels and restaurants, *meat, poultry, and fish* are usually handled by specialized workers such as butchers, meat cutters, poultry butchers, and fish butchers. It should be added that many managements prefer to buy many of these products already cut to their specifications, in order to reduce labor costs.

Besides specialized experienced cooks, hotels, restaurants, and other food services employ a great number of *semiskilled or unskilled workers*, such as storeroom attendants, coffee makers, cleaners, porters, runners, dishwashers, pot washers, etc.

CATERING INDUSTRY EMPLOYEE

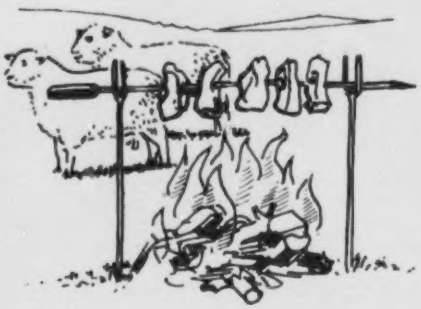
Food service employees often belong to *labor unions* and are paid according to the rates agreed upon and set forth in their contract with the management.

A Glance at the History of Food and Food Processing

It is of course impossible to know *when man ate his first cooked food.* It is probable that a starving cave dweller stumbled one day on the charred remains of an animal caught in a forest fire caused by lightning, and thus became the first person to appreciate the very first "Charcoal Broiled Venison".

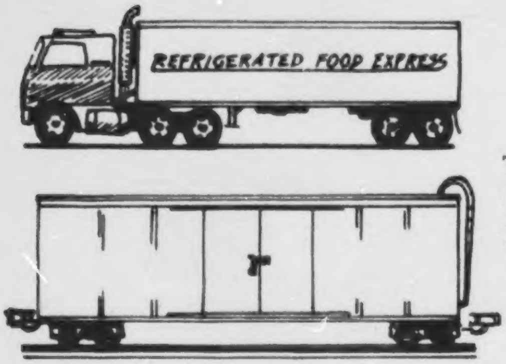
The discovery of *prehistoric cooking vessels and tools* tells us that the cooking of food was practiced thousands of years before our civilization.

The *early Greeks and Romans* are known to have brought cooking to a highly developed art.



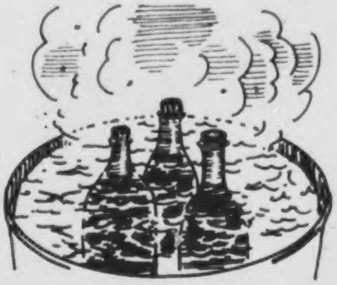
For many centuries, dishes were prepared from *locally available foodstuffs.* This explains the fact that there are so many well-known regional specialties.

Raw and cooked food always had to be consumed *within a relatively short time* to avoid spoilage.

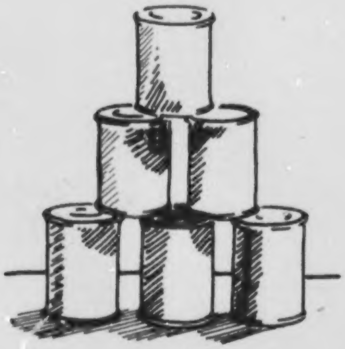


The *improvements in transportation* and its speed made a larger variety of foodstuffs available to more people.

For thousands of years the only means of preserving foods were *smoking, salting, and drying.*



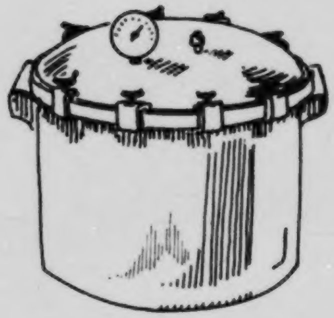
In 1809 a Frenchman, Nicholas Appert, discovered that foods placed in *sealed, air-tight containers, immersed in boiling water for several hours,* could then be kept, still in their containers, for long periods of time at room temperature without spoiling.



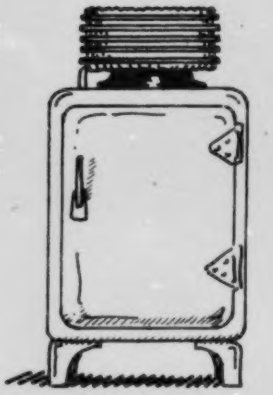
In the next year (1810), a patent for manufacturing a *tin can* was granted by George III in England.

Appert's method of processing cans or bottles in boiling water worked well for *fruits and acid vegetables* like tomatoes, but there was a high rate of spoilage for non-acid vegetables, meats, and fish.

A French chemist, *Louis Pasteur* (1822–95) is recognized as the father of modern food preservation as a result of his work in bacteriology, fermentation, and sterilization. He was the first microbiologist.



Invention of the *pressure cooker* by A.K. Shriver of Baltimore in 1874 enabled canners to process foods at temperatures up to 250°F., far above the boiling point of water. This made the canning of non-acid foods safe.



The invention of *electric refrigeration* at the beginning of the 20th century was another major event in the food industry.

Shortly before World War II, *quick-freezing* of foods was developed. Today we have not only individual foods available in frozen form, but all sorts of combination dishes as well.

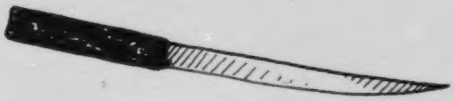
Science and Technology are now playing an ever-growing role in the food industry. Today there are chefs working side by side with scientists and technicians in the development of new dishes or new methods in large food-processing plants.

Besides being a necessity, cooking is *a craft, an art, and a science.*

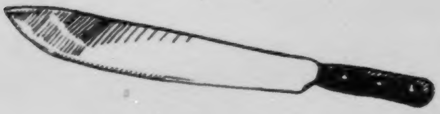
Cooking can be divided into several broad, sometimes overlapping *categories*: home cooking, commercial and institutional cooking, industrial cooking, and the so-called gourmet cooking, sometimes known by its French name of "haute cuisine".

Cooking Tools and Equipment

Tools and Utensils



Boning knife: a thin knife with a rigid or flexible pointed blade. It is used to remove bones from raw meat.

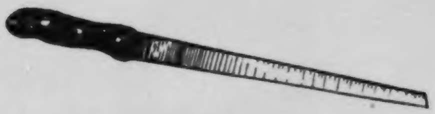


Butcher knife: heavy, thick-bladed knife, pointed and often slightly curved. Used to work on large pieces of raw meat and to cut steaks.

Butcher steel: a magnetized, rod-like steel tool, fitted with a wood handle. Used to keep the edge of a knife sharp.

Meat cleaver: a heavy steel tool made of a rectangular, thick blade and wood handle. Used to section or split bones not large enough to require a saw.

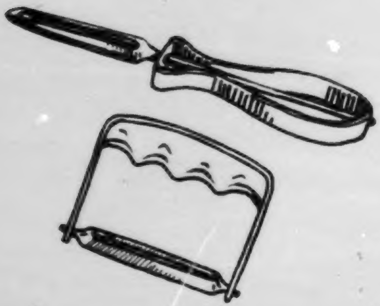
French knife: knife with carbon-or stainless-steel, wide blade, tapering to a point. By far the most-used cutting hand tool in food preparation. Overall length varies from 12 to 18 inches.



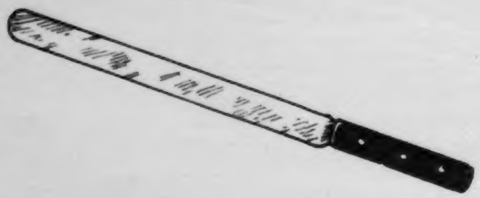
Ham slicer: a light-weight knife with a 10- to 12-inch long, semiflexible, narrow steel blade with a square tip. Used to carve hams and also turkey breasts.

Hand meat saw: fine-toothed, thin and narrow steel blade supported by an arched metal frame on which is attached a large wooden handle. It is used to cut through bones and sometimes through frozen meats.

Paring or utility knife: a short (3- to 4-inch) knife with a pointed blade. Used mainly for work on small vegetables but also on different work too fine for the smallest french knife.



Vegetable peeler: small, double-bladed knife that swivels easily. Designed for easy peeling of vegetables, produces a very thin peel, resulting in a minimum of waste. They are of two different types as illustrated.

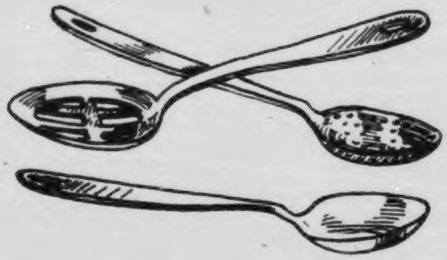


Roast beef slicer: a knife with a narrow, long, semiflexible blade with a rounded tip. Used primarily to carve standing rib roasts and "steam boats" in horizontal position.

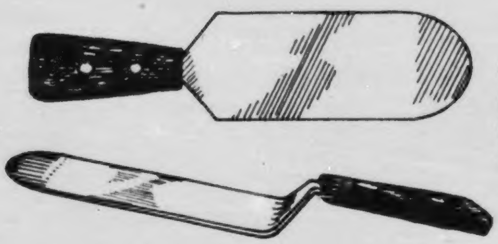
Kitchen fork: a heavy, forged-steel, two-prong fork with a wood handle. Used for turning, lifting, moving, or steadying large pieces of hot meat.

Ladle: metal cup attached to the end of a long metal handle. Used in stirring, mixing, and serving liquid or semi-liquid foods. Sizes vary from very small (1-ounce capacity) to very large (½ gallon).

Parisienne knife or melon scoop: small metal cup with sharp edges, mounted on the end (or both ends) of a small handle. When 2 cups are mounted on the same handle, each is of a different size. Parisienne knives are used to scoop out uniform balls from fruits and vegetables.

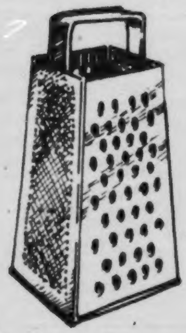


Kitchen spoons: long, sturdy metal spoons either solid, slotted, or otherwise pierced with holes.

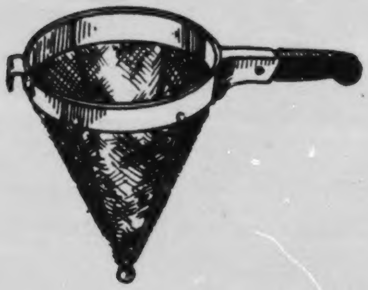


Spatula: thin metal surface of different shapes and rigidity, with a wood handle. Used to move, lift, turn, or serve small food items by slipping the blade under them.

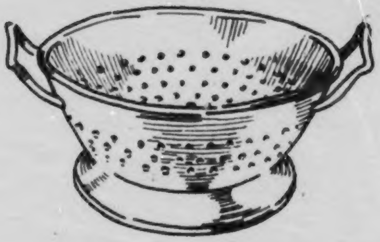
Wood paddle: long, all-wood kitchen tool used to stir foods in large pots or steam kettles. Wood paddles should always be checked before use for any loose spinters.



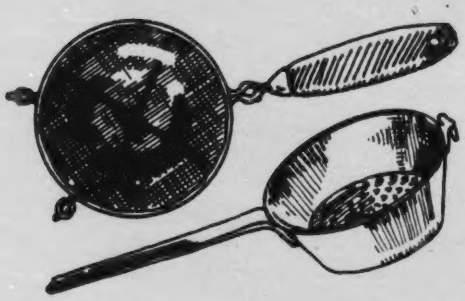
Box grater: Four-sided metal tool on which foods are rubbed to produce four different sizes of strips, according to the side used.



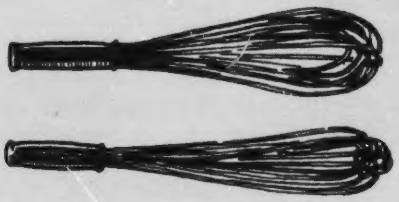
China cap: heavy, cone-shaped metal strainer with a long handle and a hook to rest across the top of a pot. Used to strain liquid and semiliquid foods.



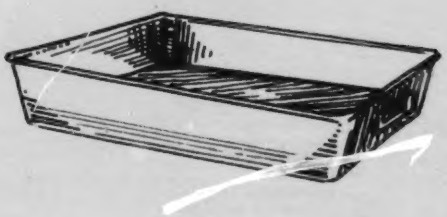
Colander: large, bowl-shaped metal strainer with two handles. Used to strain, wash, or drain large amounts of food.



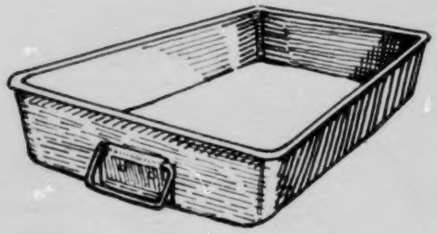
Strainer: perforated metal bowl or wire mesh bowl with a long handle and hooks. Used in the hand or resting on the rim of a pot to strain or drain smaller quantities of food.



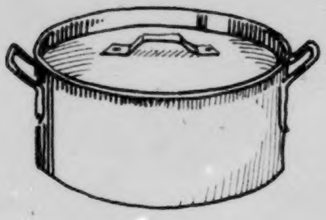
Whip: hand tool made of several lengths of wire whose ends are brought together as part of the handle. The wires form wide loops. The "piano" whip (lower picture) is more flexible than the French whip (upper). Whips are used in whipping cream, eggs, or other liquid or semiliquid foodstuffs.



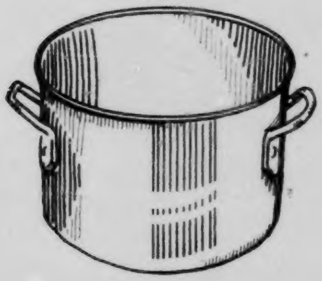
Baking pan: rectangular, often aluminum pan, 2 to 3 inches deep, with straight or sloped sides and hinged handles. Baking pans are sometimes used on heating plates.



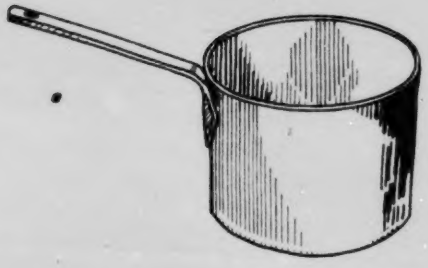
Roasting pan: a deep (3- to 4-inch) iron pan with hinged handles to bake or roast large pieces of meat (beef, veal, lamb, turkey, ham, etc.) or large quantities of smaller items (capons, chickens, etc.). The most popular size is 24" x 18" x 4".



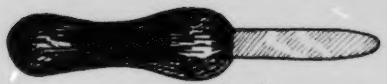
Braiser: large round or oval pot, roughly half as deep as wide, with heavy loop handles and a tight-fitting lid. Braisers can be used on top burners or in the oven. They are used for braising, stewing, and for large amounts of gravies and sauces. Their size varies from 2 gallons to 6 or 7 gallons.



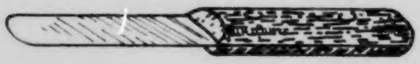
Sauce pot: a heavy pot higher than wide, with heavy loop handles and a tight-fitting lid. They are used on the top burners in cooking liquid or semiliquid foodstuffs. Their size varies from a few quarts to 10 or 12 gallons.



Sauce pan: A fairly large, round, slightly deep pot similar to the sauce pot but equipped with a long handle with a hole for easy hanging. It has the same uses as the sauce pot but for smaller quantities of food.

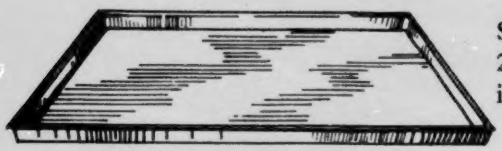


Oyster knife: a short, dulled-edged knife with a tapered point. It is used to open oysters.



Clam knife: a short, thin-bladed knife used to open clams.

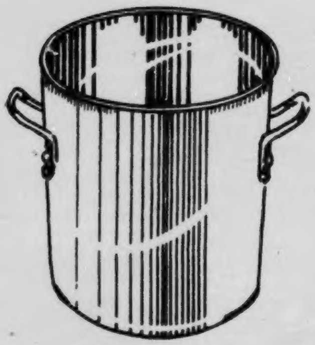
Food tongs: tool used to serve any food that can be gripped without damage.



Sheet pan: a very shallow, rectangular pan, usually 25″ x 18″. Used by cooks in a multitude of ways in the preparation of cold or hot dishes.

Skewers or brochettes: various sized wood or metal pins on which pieces of food are arranged prior to cooking by frying, baking, or broiling (e.g., shish kebab).

Frying or sauté pan: round, shallow pan of aluminum or iron with a long handle. Sizes vary from 7 to 20 inches in diameter. Used to sauté (fry in shallow fat) vegetables, small cuts of meat, and small whole or portion-size pieces of fish.

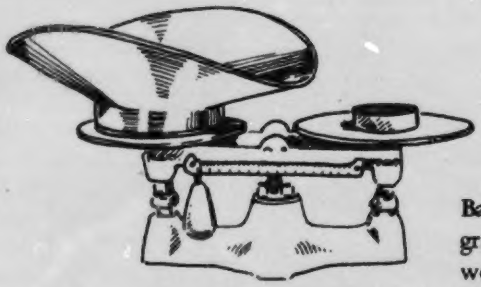


Stock pot: a large, round, high-walled pot with heavy handles. Used for cooking large amounts of foods in water (turkeys, hams, corned beef, etc.). Sizes vary from 2 to 30 gallons. The larger ones are sometimes fitted with a faucet near the bottom to drain off their liquid content. The use of a steam kettle is preferable to the use of the very large stock pots.

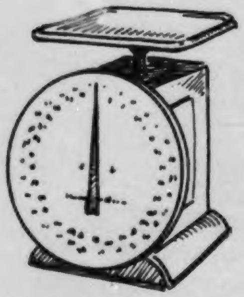
Measuring cup: Metal cup with a handle and a lip for easy pouring. Cups are marked by raised lines to indicate ¼, ½, and ¾ of their capacity. They are available in gallon, half-gallon, quart, and pint sizes.

Ice cream scoop: Originally invented to serve ice cream, they are used today to serve a variety of foods: mashed potatoes, potato salad, cole slaw, chicken salad, etc.) They are also used as a measuring device when preparing large numbers of croquettes, patties, etc. of uniform size. There are several different sizes of scoops. The number engraved inside the scoop is the number of level scoops that can be obtained from a quart of food. Thus, the smaller the number the larger the scoop.

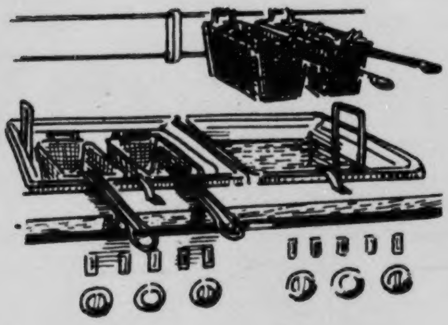
Heavy Cooking Equipment



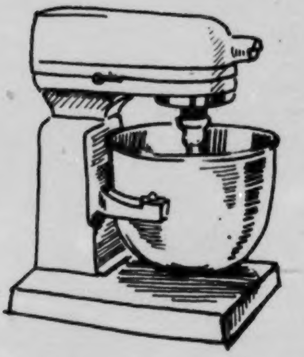
Baker's scale: very accurate, double-tray scale with a graduated beam on the front supporting a movable weight. A scoop is always used for loose foods and is counterbalanced by a special metal weight.



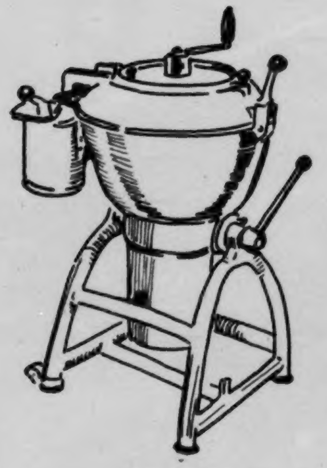
Portion-control scale: a small scale on which small items are weighed when accuracy is needed. A rotating pointer shows the weight on a face dial graduated in ¼ ounces from ¼ oz. to 2 lbs.



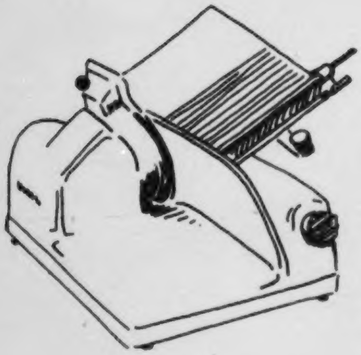
Deep fryer (also called Fryolator): a large frying kettle holding between 25 and 50 lbs. of shortening. Fryers are operated by gas or electricity and are equipped with a thermostat to maintain a chosen temperature for the shortening (from 250°F. to 450°F.). Some models feature an automatic basket lifter operated by a timer.



Stationary mixer: a very versatile piece of equipment used for mixing, whipping, and blending foods. With added attachments it will also grind, slice, shred, and chop foods. The same machine can usually be fitted with two different sizes of bowls.

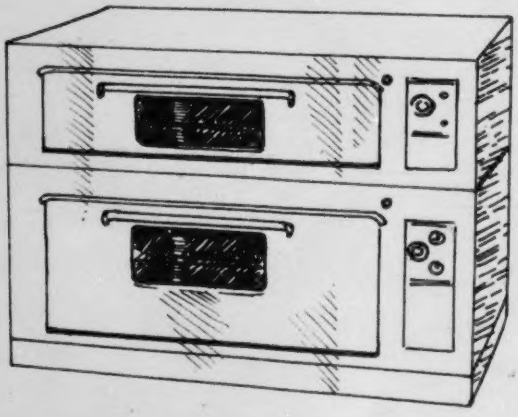


Vertical cutter: a rather recent addition to the array of kitchen equipment. This is a very versatile machine, chopping and mixing large amounts of foods in an incredibly short time. A high-speed rotating blade actually cuts food while in mid-air, thus reducing bruising and mashing.

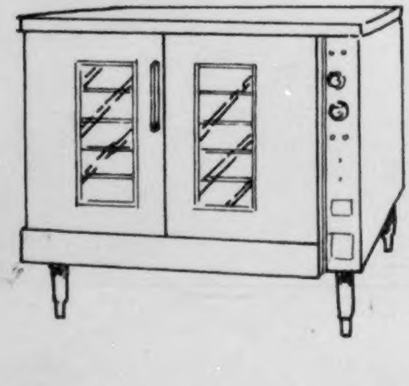


Slicing machine: electric machine equipped with a fast rotating circular blade and a sliding food tray. The use of a slicing machine permits the user to obtain large quantities of slices of various foods in a minimum of time and of a uniform thickness. The thickness is set by turning a large, calibrated knob.

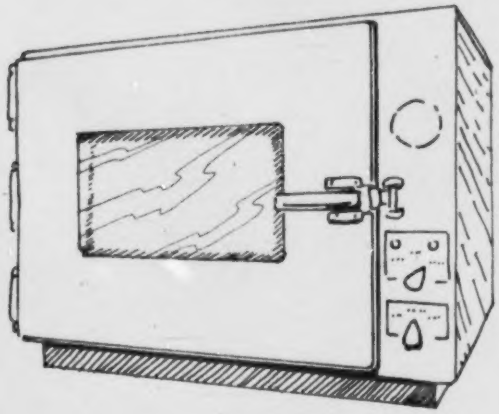
Floor oven: the type of oven found in all kitchens. It rests on the floor, and the top is used for burners and hot plates. These ovens are operated by gas or electricity and are equipped with thermostats. Their low level is an inconvenience which cooks have to put up with until given a chance to use other types of ovens not requiring constant stooping.



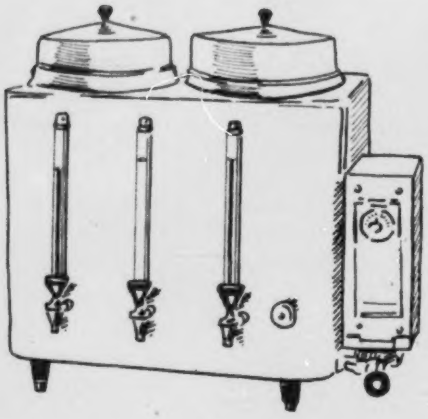
Baker's oven: a type of oven – electric or gas-fired – twice as wide as floor ovens and usually consisting of two units, set one on the top of the other.



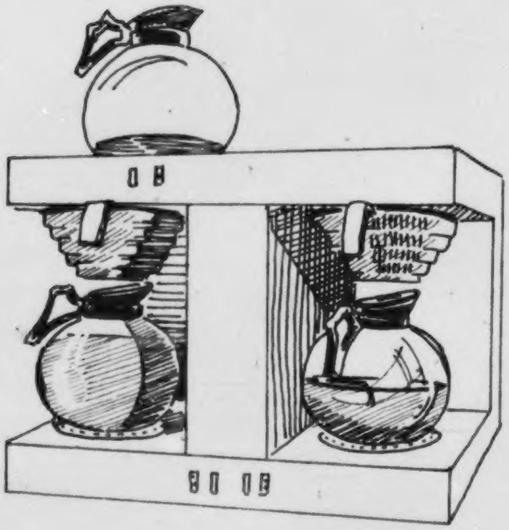
Convection oven: Oven – gas-fired or electric – in which the air is constantly circulated by use of a powerful inside fan. This flow of air permits the loading of the oven to full capacity while still insuring uniform cooking.



Microwave oven: oven utilizing waves of electromagnetic energy. Food is cooked by the heat produced as the microwaves penetrate it and cause very rapid vibration of the food molecules. Present technology (1977) does not allow the manufacture of microwave ovens large enough to be used efficiently by large commercial kitchens. No metal should ever be placed in the oven (dishes, trays, or even bag fasteners).



Coffee urns: Large stainless steel urns in which up to 20 gallons of coffee can be made at one time. They are operated by gas or electricity and are permanently connected to a water line. A thermostat keeps the water at 212°F. in the so-called water jacket surrounding the coffee container. This water can also be drawn from a special spigot for hot beverages such as tea or decaffeinated instant coffee. Large machines often consist of several units working independently.



Drip coffee makers: Another type of coffee maker growing in popularity is the drip-type shown here. Used in all types of establishments, from diners to exclusive restaurants, these coffee makers make small quantities at a time. The coffee produced is more likely to have a freshly made taste than that from the large urns.

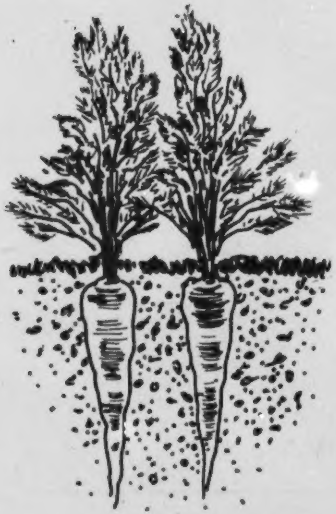
38

VEGETABLES

Since earliest times, vegetables have been important in the human diet.

An infinite variety of dishes – hot and cold – is available to us due to the many different types of edible plants – vegetables, herbs, and condiments. Some of these are used in their wild state, but most have been greatly improved by cultivation and selective breeding.

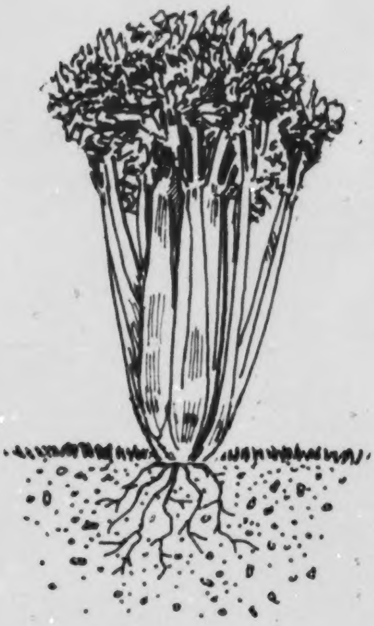
With some effort, all the essentials of a balanced diet can be had by combining vegetables of different types: protein, fat, carbohydrates, mineral salts, and vitamins.



The vegetables we eat are actually different edible parts of certain plants: roots or bulbs, leaves, flowers, leaf stems, fruits, and seeds.

Potatoes, turnips, yams, radishes, carrots, beets, onions and garlic are roots or bulbs.

Asparagus, hops are young shoots.



Celery, rhubarb, and leek are stems or leaf stalks.

Spinach, lettuce, cabbage and watercress are leaves.

Tomatoes, melons, squash, pumpkins and cucumbers are fruits.

Cauliflower and artichokes are flowers. Broccoli is unopened flowers (buds).

Cereals such as wheat, rye, buckwheat, and barley are ripe seeds. So is dry corn, used for cornmeal and pressed for oil.

Green peas, lima beans, sweet corn are immature seeds. The same types of seeds when mature and dried are also vegetables – dry beans, soybeans, limas, peas, lentils. Green beans and edible-podded peas are seed pods (fruits), with the seeds only slightly developed.

Beans, peas, lentils, and peanuts belong to a special class of plant called legume. The roots of all legumes have little nodules on them containing a special type of bacteria that "fix" nitrogen. The plants can thus use free nitrogen from the air in the soil for growth, and they also enrich the soil.

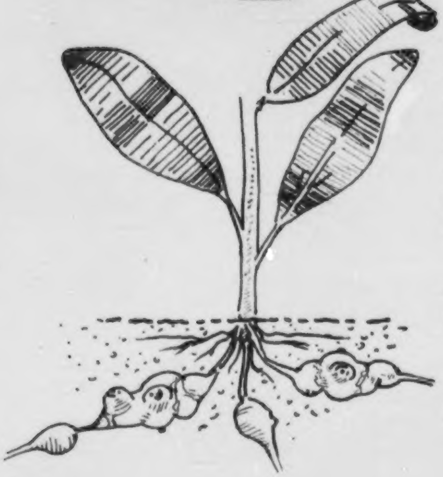
Canned and frozen vegetables provide the possibility of varied menus regardless of season and geographical location.

Canned and particularly frozen vegetables posses the same nutritive values as all but the very freshest vegetables.

Artichoke

The globe or French artichoke is the immature flower head of a large, thistle-like plant with huge, rough leaves up to 4 feet long. The plant grows wild in southern Europe and is cultivated in this country mainly in the coastal regions of California.

Artichokes may be served boiled, with the scales dipped in butter before being eaten, or marinated in oil. It may also be fried or stuffed and baked.



The Jerusalem artichoke is in no way related to the true artichoke. This is the potato-like, tuberous root of an American perennial sunflower that grows 6 to 12 feet tall. The tubers are used as a cooked vegetable, as a raw or marinated relish, and as livestock feed.

Despite its name, the Jerusalem artichoke has nothing to do with the Far East. The word "Jerusalem" is a corruption of the Indian word for sunflower. The plant was cultivated by American Indians. A better name for it is **sunchoke.**

Asparagus

Asparagus stalks are the edible young sprouts or shoots of a plant cultivated in most parts of the world. Modern varieties were developed from the wild species which is found in temperate climates and sandy soils on all continents.

The most common asparagus in the United States is the green asparagus. Possibly the best tasting asparagus is the French white asparagus, called Argenteuil asparagus from the name of the locality where it is produced.

Asparagus has few calories. It contains some vitamin C, iron, and several other nutrients, but its popularity is no doubt due to its delicious taste. It is one of the most expensive of vegetables.

Asparagus should be carefully cooked to avoid even the slightest amount of overcooking. A mushy asparagus is an awful looking thing to serve and eat.

Fresh asparagus should be soaked in cold water and then washed with great care to dislodge any fine particles of sand.

Barley

Barley is a very ancient plant of Asiatic origin. It is mentioned often in the Bible.

Barley grain is used in the brewing of beer and other malt beverages.

In the kitchen, barley is used mostly in the preparation of soups.

Beans

Beans are the seeds of a wide variety of legume plants. In many types the pod is tender and edible when young. These edible pods are known broadly as green beans or snap beans. At maturity, only the seeds, also called beans, are edible. They are threshed out from the pods, which become tough, stringy, and leathery when ripe.

Dry beans include such varieties as: Red Kidney beans, White Great Northern beans, and Navy beans.

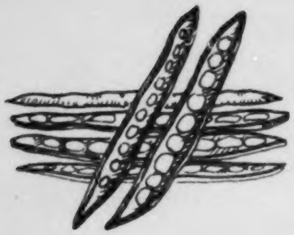
Dry beans of many types provide a year-round supply of relatively cheap and highly nutritious food. They come close to being an adequate substitute for meat.

Dry beans are believed by many to need soaking in water for many hours prior to cooking. This is a fallacy. Soaking for one or two hours is generally sufficient, and soaking is not even necessary if the beans have been harvested and dried within the year.

Lima beans come originally from South America. They are now cultivated widely in California and other areas with a fairly long growing season. Two types are popular: the regular lima beans, ¾ of an inch or so in length and thick (often called Fordhook type) and the much smaller and thinner "baby" lima beans.

Green beans are nutritionally very different from mature beans. They are a low-calorie vegetable with small amounts of protein, minerals, and vitamins.

Wax beans are similar to green beans but of yellow color. They are also called butter beans.



French green beans are green beans cut lengthwise into 2, 3, or 4 strips.

Green beans are eaten cold in salads, or hot according to many different recipes.

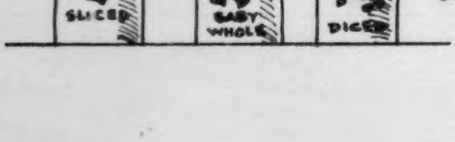
Green beans should not be overcooked; they should be served "al dente" – to use a term more often applied to pasta.

Green beans are available fresh in season and all year round frozen and canned.

Beets

Beets or beetroots are of many varieties, some cultivated solely for the making of sugar or alcohol, some as animal foodstuff, and some, as in the case of the garden red beets, as vegetables. Beet greens when young are a very tasty and nutritious green vegetable.

Red beets have a long history. Originally they had small, rough roots and were cultivated in ancient times principally for their leaves. Modern beets for cooking are usually well-shaped, well-colored, and fairly smooth. Today the Russians utilize the whole plant, roots and leaves, as ingredients in the preparation of their famous borscht (a hearty, sweet and sour, meat and beet soup).



Beets are usually found on the market already cooked and canned. Unfortunately these cannot compare with the superb taste and texture of fresh beets cooked at home.

Beets are eaten cold, sliced or julienned, in salads or pickled; or hot, sliced or diced, as a vegetable. Harvard beets are beet cubes heated in a slightly thickened, sugar/vinegar sauce.

Beets are higher in calories than green or more watery vegetables, but not as high as potatoes, peas, or green limas.

Beets are not a particularly nutritious vegetable; beet greens, however, are rich in many vitamins and minerals.

A type of beet developed for its greens only is called Swiss chard, or simply chard.

Broccoli

This is a member of the cole (cabbage-like) family of vegetables. It is closely related to the cauliflower. Its leaves are much narrower, however, and the edible part is harvested while the flower buds are still tightly closed and green or purplish. The more tender leaves are eaten along with the flower buds and stems.

Broccoli is somewhat difficult to handle in cooking and serving. The thick stems should be slit lengthwise to speed their cooking; otherwise they would have to be cooked for a much longer time than the buds.

Brussels sprouts

Another cole crop, brussels sprouts look like very small cabbages. They grow along the heavy stalk of the plant, each at the base of a leaf.

Brussels sprouts are always boiled or blanched before being sauteed in butter.

Most brussels sprouts on the market are produced in California. Some from New York and Oregon are available also. The taste of the sprouts is sweeter and better after the plants have had some frost.

Cabbage

The cabbage is the best known member of the cole group of vegetables, including broccoli, cauliflower, brussels sprouts, collards, kale, and kohlrabi. This whole group in turn is a member of the mustard family, which also includes mustard greens, turnips, rutabaga, rape, Chinese cabbage, and pakchoy.

Modern varieties of cabbage have been developed through the years from a wild variety native to central and western Europe. Cabbage has been cultivated since very early times, apparently mainly in Europe.

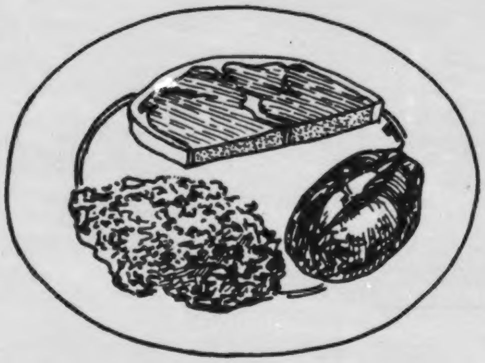
Cabbage does not seem to have been known to the ancient Jews, as it is not mentioned in the Bible.

After centuries of cultivation, several types of cabbage have emerged as most popular for human consumption, including early green cabbage, late white cabbage, red cabbage, and savoy cabbage.

The smooth-leaved green cabbage is preferred for cooking as a vegetable or as an ingredient in vegetable soups.

The hard, white cabbage is the type generally used for cole slaw.

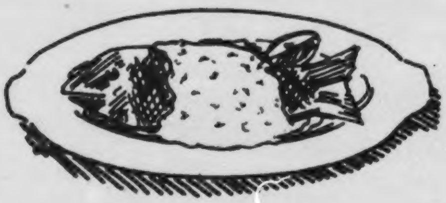
The crinkly-leaved cabbage, or savoy cabbage, is preferred for salads and makes a more tender cole slaw than the white cabbage.



Red cabbage is not very popular in the United States, although it lends itself to very pleasing hot and cold preparations. It is often prepared as a sweet and sour vegetable.

Cabbages are sold either fresh or from storage, where they can be kept several months without drying or spoiling.

Capers:



Capers are the flower buds of a shubby plant growing in Mediterranean countries.

Capers are pickled in vinegar and used as condiments for fish and meat or in the preparation of salad dressings and hot sauces.

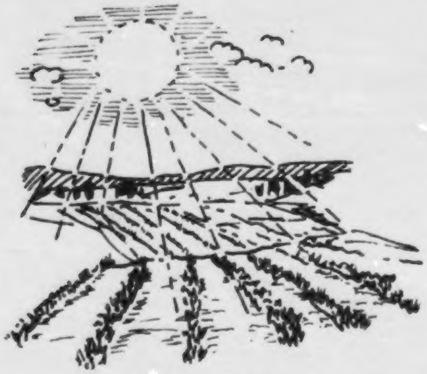
Carrots

The carrot as we know it is a fairly recent plant which came from a wild variety found in Europe around the 16th century, and has been greatly improved by plant breeders.

The wild carrot plant was used by the ancient Romans as a medicinal herb. Its large sugar content and its richness in vitamins (particularly vitamin A) make it indeed a food of considerable nutritive value.

There are many varieties of carrots, differing in color, length, sweetness, and the amount of core.

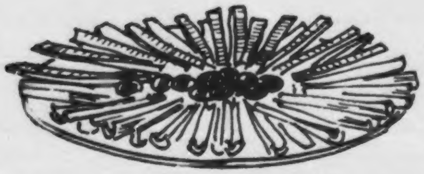
The quality of a carrot depends partly on the amount of core or "heart" (the woody core in some cases is barely edible). Plant breeders are working constantly to reduce the size of this heart.



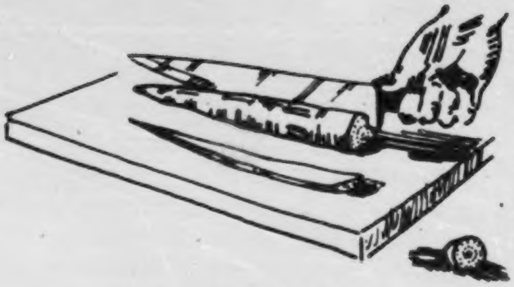
Another thing that determines quality is the area in which the carrot was grown. Carrots from sunny California and Arizona are much sweeter than those from the northern states or Canada, and are more suited to being served raw.

Fresh carrots are in abundant supply all year round. They are also sold frozen and canned, either diced, or sliced, or whole as "baby" carrots.

Imported canned baby carrots – from France and Belgium – are available in the gourmet food departments of many stores.



Carrots are eaten raw – julienned or grated – in salads. Cut lengthwise in small strips, they are served in relish trays (carrot sticks). They are also eaten hot in many different vegetable dishes.



Cutting a carrot, especially lengthwise, can be dangerous because of the likelihood of the carrot's slipping out from under the knife. A small strip should be shaved off the length of the carrot to prevent its rolling while cutting.

Cauliflower

Another member of the cabbage family, cauliflower is of Oriental origin. From Europe, especially Italy, where it had been known for several centuries, cauliflower was introduced to America by early settlers.

The edible white part of the cauliflower (the flowers) is called the curd, and the thick green leaves, the jacket.

Cauliflower is produced in many states and is available fresh a good part of the year.

Cauliflower florets are used in cold salads and are often pickled and served on relish trays. Cauliflower is nevertheless known more as a hot vegetable.

Cauliflower will stay whiter during cooking if wedges of lemon or a small amount of white vinegar is added to the water.

Celery

Celery became a table vegetable during the Middle Ages. Prior to this time, celery in its wild state was not regarded as fit for human consumption.

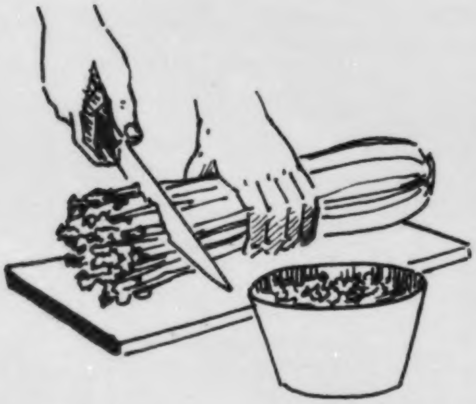
Celery does not provide many calories, and contains a good deal of indigestible fiber. For both these reasons it is a favorite of dieters.

Celery is very popular all over the world and is used extensively in the preparation of many dishes, hot and cold, to which it gives a distinctive but still mild flavor.

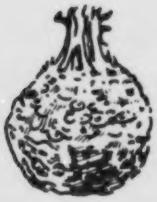
Celery should always be peeled to remove the stringy ribbed outer part of the stalks.

Celery is usually sold wholesale in wooden-slat boxes lined with sulphurized heavy paper. A box contains 24 bunches.

Celery hearts are served as an appetizer in the popular relish trays.



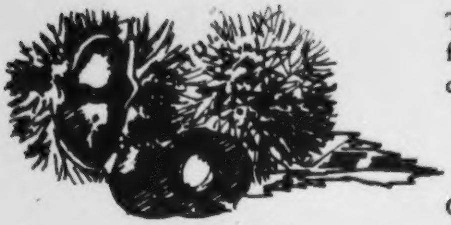
The trimmings from the celery stalks should be saved for use in the preparation of soups, gravies, roasts, stuffings, etc.



In this country celery is cultivated principally for its long leaf stalks. Another type of celery has been bred for its root, which is greatly enlarged, while the leaf stalks are narrow and stringy. This type is called **celeriac**.

The knobby roots of celeriac are eaten raw in salads, boiled, or served in soups and stews. Celeriac is much more popular in Europe than in the U.S.A.; hence it is not readily available here. It is sometimes called turnip-rooted celery.

Chestnuts



These delicious, mealy nuts have been a popular food since ancient times and a staple food for centuries in many Mediterranean countries.

Chestnuts are much appreciated roasted – especially when bought on a cold winter day, from one of the few street vendors remaining from the "good old days."

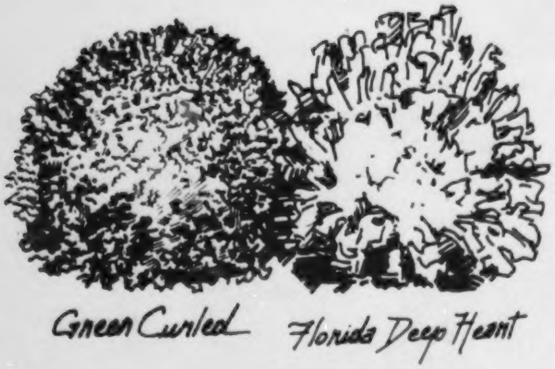
Chestnuts are very seldom used in this country as a vegetable, although they are often added to the stuffing of a holiday turkey.

A flour of rather poor quality is obtained from the chestnut; this is used in some parts of France, Corsica, and Italy in the preparation of a sort of Polenta.

Boiled and pureed, chestnuts are the basic ingredient in the preparation of desserts, some of them highly sophisticated.

Chicory

Chicory is related to the lettuce family. There is much confusion as to its correct name – whether chicory, escarole, or endive.



Most chicory in this country has the botanical name *Cichorium endivia.* Technically, it should be called endive. However, in the markets you will find it called chicory. The plant consists of many low, spreading leaves. The leaves vary from deeply cut and curled in some varieties to the broad, slightly cut and curled leaves of escarole. The outer leaves are dark green, and the center leaves or heart and the midribs are pale green to creamy white. This blanching (whitening) is done by tying the outer leaves together while the plants are growing, thus depriving the center leaves of light.

Chicory is slightly bitter and is often used together with lettuce, escarole, and romaine as a mixed green salad.

Witloof chicory – a true chicory – is usually sold as French or Belgian endive – narrow, blanched heads that resemble small plant shoots and weigh perhaps 2 ounces apiece. These are produced by planting the harvested roots of the chicory plant (with the tops trimmed off) in boxes of peat and sand, and keeping the boxes in a warm, dark place in the winter. Shoots start to grow, and in a few weeks they are harvested. The lack of light prevents the chlorophyll from turning the leaves green.

The blanched (white) leaves of French or Belgian endive are rather bitter. This vegetable is not readily available and is always quite expensive.

Witloof chicory may also be sold as green leaves. They are larger plants than the endives described before: the leaves are taller and more coarse and grow in a more upright position.

The lovely blue daisy-like wildflowers that bloom in the fields in summer are the flowers of the witloof chicory. "Escaped" from a few imported plants, these "blue sailors" or blue chicory flowers signal the arrival of summer weather in many places. The roots of this plant are sometimes dried and ground as a substitute for coffee. (Botanical name, *Chichorium intybus.*)

Chinese cabbage

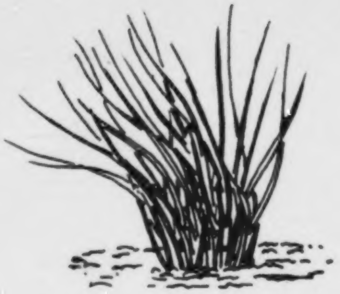
Chinese cabbage is a member of the mustard family but not a cole crop. Another name for this plant is celery cabbage. It forms a compact stalk about 18 inches tall, with pale green, broad-ribbed, crinkled leaves.

A type of Chinese cabbage growing in popularity is called Nappa. It has a short, compact head of finely curled, pale leaves with thick, white ribs. Its flavor is a little milder and sweeter than that of the longer type described above.

A closely related plant is pakchoy, Bok–Choi, spoon cabbage, or white mustard cabbage – pick the name you like best! This type has more rounded stalks and broad, dark green blades. Each individual rib is shaped something like a spoon.

All varieties of Chinese cabbage make excellent cooked vegetables, and add a crisp touch to soups and salads. They are, of course, very popular in Chinese cookery.

Chives



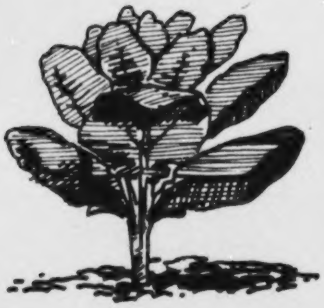
Chives belong to the onion family, which also includes garlic, leeks, and shallots. Chives grow wild in Europe, Asia, and the northern part of the United States. They are now cultivated commercially and in many home gardens.

Chive leaves are about 6 to 10 inches long and somewhat resemble blades of grass. They are not flat, however, but tubular, and taper to a point.

Chives are used for flavoring soups, sauces, and stews, and as condiment in salads. Their flavor is a little milder than that of onions.

Chives should never be chopped but rather sliced into tiny rings with a very sharp knife or scissors.

Collards



Collards were at one time considered only a southern vegetable, but they are now available in some markets in other parts of the country.

A member of the cole group of vegetables, collards are highly nutritious. They require longer cooking than most other "pot greens." They are not tender enough to use raw in salads.

Corn

Corn is a truly American vegetable, having been cultivated by the Indians long before the arrival of the first European settlers. Corn on the cob was enjoyed by the earliest American settlers.

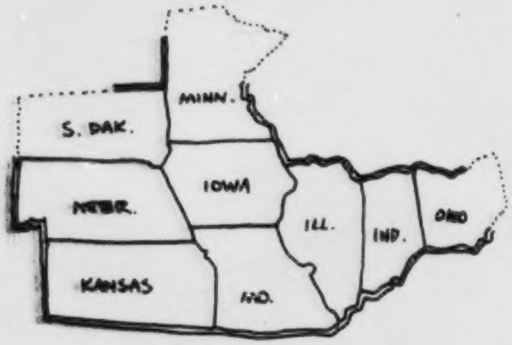
Corn is a cereal crop, that is, a type of grass with highly developed seeds.

American farmers grow two types of corn – sweet corn to be eaten as a vegetable before the seeds are ripe, and field corn – used after full maturity for animal feed, corn oil, corn meal, and countless other uses.

The yellow-kernel corn is by far the most popular corn, having been the object of countless years of breeding work by plant scientists. It is superior in vitamin A to the less appreciated white-kernel corn, but the white corn tends to be sweeter.

The famous polenta is the coarse meal left after the oil has been squeezed out of the kernels.

Corn is also used in some South American countries in the brewing of a beer-like beverage and the making of alcohol. It is the principal ingredient in bourbon, an alcoholic drink.



Field corn is the major crop of the central portion of the United States from western Ohio into Nebraska and Kansas, including eastern South Dakota and southwest Minnesota. Indeed, this is called the Corn Belt.

Corn consumption by humans and animals is increasing steadily in the United States. In European countries, however, it is not an important vegetable or feed crop.

Corn is available fresh in season, frozen – on the cob or in kernels, and canned – whole-kernel or cream-style.

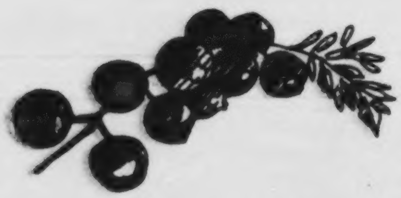
Corn should be refrigerated immediately after being picked or immediately after being purchased. Kept cold and moist, fresh corn will retain fairly good quality for a number of days.

If corn is not sweet, some cooks add a small amount of sugar to the cooking water.

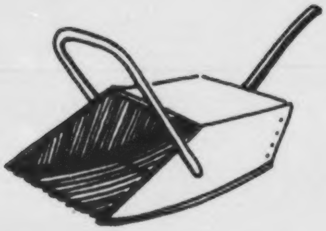
Corn can also be roasted while still in its outer leaves, either in an oven or under hot ashes, as is often done in New England picnics.

No salt should be added to the water while cooking corn, as salt will toughen the kernels.

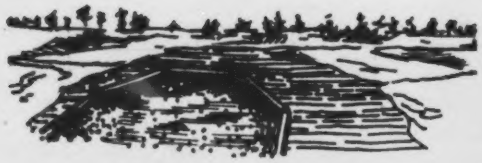
Cranberry



The cranberry is of course a fruit, but it is used as a vegetable, generally as an accompaniment to poultry dishes.



Cranberries grow in sand-covered bogs, mainly in the northeastern states.



In today's mass production, huge bogs, surrounded by firm dirt, are flooded and drained at will. In harvesting, the plants are agitated so that the berries rise to the surface and float on the water. They are then guided to a scooping truck by men standing in the water and pushing a large boom made of pieces of lumber.

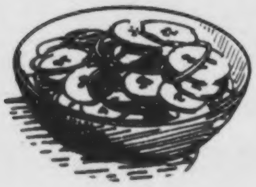
Cranberries are used mainly in jellied sauces and salads, either as an accompaniment to meat or as a salad dish on their own.

Cucumber

The cucumber is a plant closely related to the squashes and pumpkins. The fruit is the part eaten.

Cucumbers are of very ancient origin and have been used in Oriental countries for more than 3000 years.

Cucumber has little nutritive value, but its high water content makes it a pleasantly refreshing vegetable.



Cucumbers are rather difficult for some people to digest. Removing part of the bitter juice (by salting and slight squeezing) is believed to help their digestion.

In summer, Greek field workers still use wide strips of cucumber peel secured to their foreheads with a handkerchief as a method of cooling. This custom probably dates from ancient times.

Eggplant

Eggplants were known in very early times. They are of Asiatic and African origin. Eggplants were introduced into Europe from Africa.

Eggplants are actually the fruits of the plant. They vary greatly in shape and size, from perfectly round to elongated and pear-shaped, and from white to deep purple.

The most common eggplant known in the U.S.A. is the elongated, pear-shape kind, with a deep purple color.

Eggplants are very seldom eaten raw. They can be prepared in many different ways: fried, stewed, and baked in combination with other ingredients, as in the famous Eggplant Parmesan dish.

Eggplant "Imam Baaldi" (meaning swooning prince) is the name of a famous Turkish recipe: Stuffed eggplant cooked slowly in enough oil to cover. It is amusing to know the dish was so named because a rich Turkish imam fainted from pleasure when tasting it for the first time ... or so says the legend.

Endive } See Chicory
Escarolle }

Garlic

Related to the onion, garlic bulbs consist of several individual cloves rather than layers. Garlic is used as a flavoring in cooking, and is especially enjoyed by people of Latin origin.

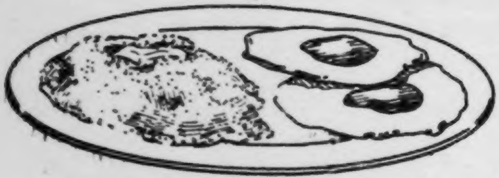
Garlic has been used for many centuries as a remedy for many ailments, from ancient Greek and Roman times to the present. Garlic is still used occasionally today as a component of some pharmaceutical products.

Garlic bulbs do not need refrigeration after harvesting. If not peeled they may be kept a long time at room temperature.

Garlic used as a condiment should be chopped very fine or even crushed and mashed, since many people like the flavor garlic adds to a dish but dislike chewing pieces of it.

Garlic cooked in butter browns more quickly than onion. Dark or slightly burnt garlic gives an unpleasant, bitter taste to the food it is added to.

Hominy



Hominy is corn kernels with the hull and germ removed. When ground up, it is called **hominy grits**, or simply **grits**. It is used, principally in the South, as a cereal food.

Hominy has little food value, being principally a starch. Dry grits, however, are generally enriched with iron and B-vitamins, like white flour.

Kale

One of the less well known of the cole crops, kale consists of deep blue-green, heavy, frilly leaves. It is generally harvested after frost and through the winter in temperate climates.

Kale is not very popular as cooked greens, because its heavy leaves may be tough. The more tender leaves do make a tasty pot herb.

Kale is so decorative that it makes a fine garnish – particularly the more tender, inner leaves.

Kohlrabi

One of the lesser known cole crops, Kohlrabi has a mild cabbage flavor that most people find delicious. The edible part is a bulb-like stem above the ground.

Kohlrabi may be served diced or sliced as a cooked vegetable, or raw on a relish tray.

Leek

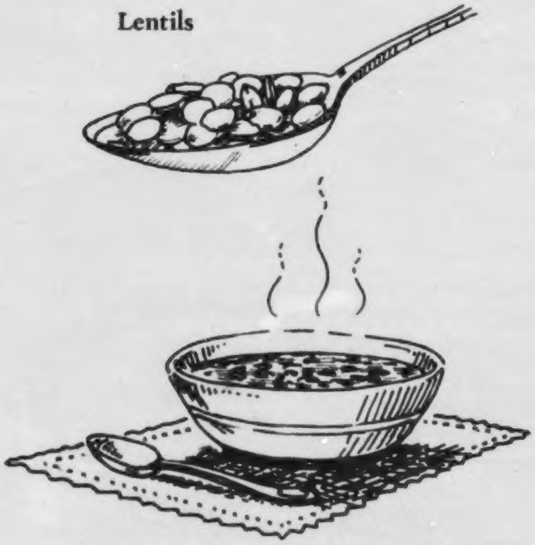
The leek is a vegetable of the onion family, looking much like a very large scallion.

Leeks do not exist in the wild state. They are known to have been cultivated more than 2000 years ago.

Although popular in many parts of Europe, leeks are not widely known and are seldom used in home cooking in the United States, except by families continuing European cooking.

Leeks are used mostly as an ingredient in the preparation of stocks, soups, and stews. They are almost never served as a vegetable in the U.S. Boiled and cooled, they are also eaten in a salad-like dish with oil and vinegar.

Lentils



Lentils are legumes, related to beans and peas. The small, flat seeds are used after drying in the preparation of soups and as a vegetable dish.

Lentils originated in Asia and were cultivated in ancient times. They are mentioned in the Bible in the story of Esau.

Like all the dry beans and peas, lentils are very rich in protein, iron, and B-vitamins.

Lettuce

Lettuce is known to have been cultivated in ancient Egypt and China. The ancient Persian kings cultivated lettuce leaves in their royal gardens.

Lettuce was cultivated as a medicinal plant by the Greeks and the Romans in the early years of history. Columbus brought lettuce seeds to the New World, and they were the first seeds sown in American colonial gardens.

Lettuce is used mainly in the preparation of salads, although pleasant dishes can be obtained by cooking it.

Lettuce salad is usually served at the end of the meal in Europe, in contrast to the American custom. (The early Romans also considered a salad as an appetizer.)

The word "lettuce" includes different varieties, including Boston lettuce, Bibb lettuce, romaine, various types of loose-leaf lettuce, and the most popular by far in the United States: iceberg lettuce (common crisp-headed type).

Many gourmet cooks feel that the standard iceberg lettuce is much inferior in taste to any of the other types.

Most lettuce is a good source of iron and very low in calories, an average serving producing between 10 and 20 calories. The iceberg lettuce is less nutritious than the others – particularly the inner leaves.

The romaine type of lettuce has long, rather smooth leaves with fairly large, edible stalks, usually sweet in flavor.

Romaine is often used by itself as a salad, accompanied by orange sections. It is often combined with other lettuces in a tossed salad.

Iceberg

Bibb

Boston

Romaine

Loose Leaf

Romaine is the basic ingredient in the world-renowned Caesar salad.

Lettuce is usually sold wholesale in cardboard cases coated with paraffin wax. Each standard case contains 24 heads.

All lettuce should be carefully washed and drained well before serving.

Lima Beans

Lima beans are the seeds of a podded plant of South American origin that is cultivated extensively in California and other warm climates. Limas are also called Cape beans and are immensely popular in the United States.

Two different types of lima beans are common: the regular-size, usually thick lima bean (about ¾ of an inch in length) and the much smaller, flatter (and more expensive)"baby" lima bean. Less common is the very large, flat shape.

Limas are fairly high in calories but are also high in protein, iron, and vitamins.

Dry limas make a delicious soup with leftover smoked meats.

Mushrooms

White Mushroom

Mushrooms are actually the fleshy fruits of a fungus plant that grows underground. They contain no chlorophyll and hence are not green. There are many varieties of mushrooms growing wild, some edible, some poisonous.

Mushrooms are used as ingredients in the preparation of cold and hot dishes, sauces, and gravies, to which they bring their subtle flavor. They are also served as a vegetable, raw in salads, and stuffed and pickled as appetizers and hors d' oeuvres.

Morel

By far the best known and most widely used mushroom in the United States and Europe is the field mushroom, also called white mushroom, now cultivated all over the world in caves, cellars, and especially in sheltered commercial growing houses.

Among the wild species of edible mushrooms, the most appreciated by American gourmets are the Morel, the Chanterelle, and the Boletus.

Boletus or Ceps

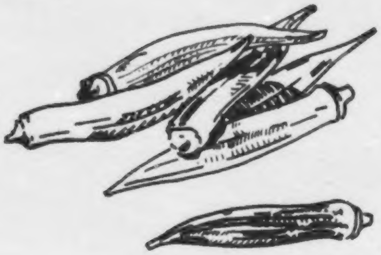
Only knowledgeable and experience people should gather wild mushrooms for consumption, and even they should limit themselves to the most easily recognizable edible species. One bite of a poisonous species can kill a person.

Canned mushrooms are sold in three different forms: buttons (or caps), sliced, and stems and pieces. Buttons are the most expensive, and stems and pieces the cheapest.

Mushrooms will stay whiter if lemon wedges are added to the water, or shortening is used while cooking.

The only nutrient that mushrooms are outstanding for is niacin, one of the B-vitamins.

Okra



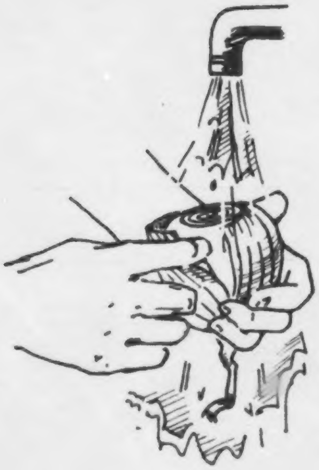
Okra or gumbo is very popular in the South. Okra pods contain a lot of gum, and therefore they are very useful in thickening and flavoring soups and stews. Okra may also be used as a vegetable.

Onion

The onion is a native of Asia and the Middle East and was cultivated long before the beginning of Christianity.

The onion was held in such esteem in Egypt that it was worshipped as other gods were.

The onion has been mentioned in many medicine books of centuries past as a remedy for various ailments.



Onions can be peeled under running water to prevent the dispersion of the acrid essence they contain, which irritates the eyes temporarily.

The onion is often called the king of vegetables. One fact is certain – it is the most used vegetable in cooking.

The onion family includes leeks, garlic, and shallots as well as the popular round onion.

Any onion when harvested in the immature state is a scallion. Scallions vary in pungency depending upon the type of onion they are. Mild ones make a good addition to a relish tray.

Globe onions are the most common group. They are pungent in flavor and odor and are considered primarily cooking onions.

There are many varieties of globe onions. Most have yellow skins, but some have white or red skins. Red-skinned onions with sweet red-and-white flesh are often used in salads and as hamburger onions.

Globe onions are sold by wholesalers in mesh bags containing 50 pounds.

The Bermuda-type is flatter than the globe onion, has a white or straw-colored skin and waxy white flesh.

The Bermuda type is preferred for slicing and eating raw, but of course is also good for cooking.

The Spanish onion resembles the globe onion in shape but is generally much larger. It is usually a yellow-skinned onion.

The Spanish onion is also called the sweet onion,for its mild flavor. It is excellent for slicing and salads.

Most varieties of onions are available all the year round.

Chopped onion to be used as a garnish (for caviar, etc. . . .) can be washed and squeezed in a towel to make it less pungent and of a brighter white.

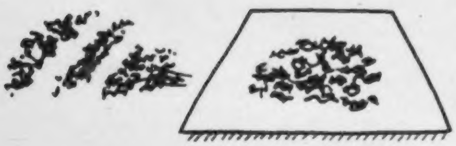
Onions will make you cry if cut with a dull knive which squeezes out and disperses the irritating juices they contain.

Parsley

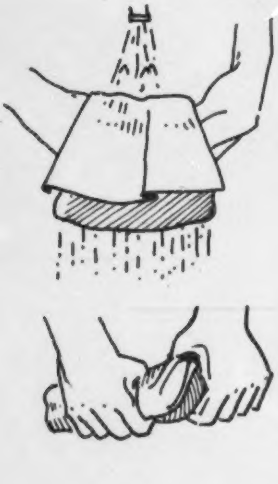
Parlsey is a green plant whose leaves are used either in cooking as a flavoring or as a garnish to a plate.

Parsley is very high in vitamins A and C, but it is generally eaten in such small amounts that its nutritive value is not too important to most people. It could be a valuable addition to your diet if you consider it as a food instead of just a garnish.

Dry parsley flakes available on the market are a poor substitute in flavor for the fresh parsley.



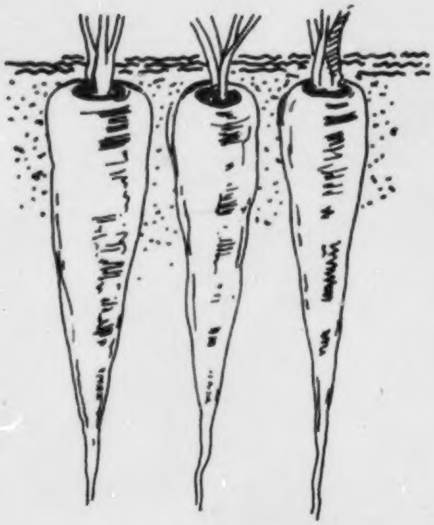
Parsley is available all the year round.



Chopped parsley to be sprinkled on dishes at serving time should be chopped, washed under running water in a bag formed with a clean towel, and squeezed dry by twisting the bag. Chopped parsley treated in this manner will stay fresh for several hours even at room temperature but, it should be known, will lose much of its flavor.

Parsley, as a flavoring in hot dishes, should be added to the dish near the end of the cooking time in order to preserve its pleasant green color and nutritive values.

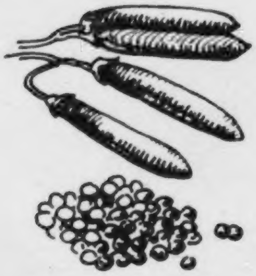
Parsnip



A popular root vegetable for soups and stews, parsnips are also good served braised as a vegetable.

Parsnips improve in flavor and sweetness after the plants have been at least touched by frost. They may actually be completely frozen in the ground and will be all the better for it.

Peas



Peas are highly nitritious and are a high-energy vegetable. Fresh peas are high in protein, iron, and the B-vitamins, and have a fair amount of many other nutrients.

Green peas are sold fresh in season and are sold frozen and canned in considerable quantities.

Mature (dry) peas, like the other mature legumes, are among the best sources of protein in the plant kingdom. Even the immature peas – like immature limas – are a fine source of protein, as well as other nutrients.

Dry peas include split peas, yellow peas, and chickpeas or garbanzos, a related species. Yellow peas are used mainly in Europe – rarely in this country.

Split peas are used in the United States mostly in the preparation of soup. They are often used in France as a vegetable in the form of puree.

Chickpeas are the dried seeds of a pea-like plant cultivated mainly in the Mediterranean region: southern France, Italy, Spain, and northern Africa.

Chickpeas are used with pasta (in Italy) and rice (in Algeria) in the preparation of local specialties. They are used mostly in the preparation of soups in the United States, although they are sometimes used cold in salads.

Edible-podded peas, also known as sugar peas or snow peas, are a type of pea grown to be eaten pod and all, like snap beans. They are harvested when the peas are just beginning to form within the pod. They are frequently served in Chinese dishes.

Among the many other types of peas are the blackeye peas, also known as cowpeas, or southern table peas. They may be eaten fresh or dried as a vegetable, or in mixed dishes. Like all peas, they are a highly nutritious food.

Peppers

Peppers are of South American origin and were passed to North America before being introduced to Europe after the discovery of America.

Peppers can be classified, for cooking purpose, into two categories: the hot peppers used as condiments and the sweet variety used as a vegetable or garnish.

Red peppers include many varieties grown in South America, India, and Central Europe. Dried and ground, these peppers become known as cayenne pepper, chili powder, paprika, and simply red pepper.

Sweet peppers are cultivated extensively in the United States today. We generally refer to them as green peppers.

Green peppers are immature sweet peppers. Left on the plant to ripen, they would turn to a bright red color. They would also become much sweeter. A few sweet peppers are yellow when ripe.

Green peppers are used extensively all year round in hundreds of preparations, cold or hot. When fresh peppers are expensive in the market, bags of frozen diced peppers may be bought.

In addition to being a flavoring agent, green (and particularly red) peppers are a highly nutritious food.

Neither the sweet peppers nor the hot peppers are related to the plants that furnish the pungent black pepper and white pepper that we use in cooking and at the table. These are ground up from the fruits of other species of plants.

Pimento

Pimento (or pimiento) is a ripe sweet pepper, sold in cans and jars partly cooked. The red filling of stuffed olives is pimento.

Pimento is used in strips or in dice to add color to hot and cold dishes rather than to give its subdued flavor.

Pimento is often cut into different shapes and used as decorations, to embellish food prepared mainly for display.

Potatoes

Potatoes are the tubers (actually fleshy underground stems) of a plant of South American origin. Potato plants were brought to Europe in the 16th century by Spanish explorers. After a rapid spread through Europe, the potato was brought back to North America – first in New Hampshire – in the beginning of the 18th century.

Potato production in the United States now involves more than 3 million acres, chiefly in Maine, Idaho, California, New York, and Minnesota. The annual yield is about 15 million tons.

Potatoes are easily digested and relatively low in calories: an average-size baked potato provides about 90 calories. (A slice of white bread provides 70.) It is the butter, sour cream, or cream sauce that we put on the potato that makes it a high-calorie food.

Potatoes are marketed fresh all the year round. They are also marketed frozen, dehydrated, and canned in a variety of forms (diced, shredded, sliced, whole).

Boiling potatoes are usually sold wholesale in jute bags containing 50 lbs. Baking potatoes are often sold in boxes containing 70, 90, or 100 pounds, either plain or wrapped in "silver" or "gold" aluminum foil.

For practical purposes potatoes can be put into three groups: new potatoes, general-purpose potatoes, and baking potatoes.

New potatoes are freshly harvested immature potatoes. They have thin skins and have a moister flesh than "old" potatoes. They are best for boiling and creaming. New potatoes do not keep well.

General-purpose potatoes include the great majority of supplies offered for sale on the market, both round and long types.

General purpose potatoes, as the term implies, are used for boiling, frying, and baking, although many of the common varieties will give poor results in baking.

Baking potatoes. Both the specific variety and the area where grown are important factors affecting baking quality.

The russet Burbank, a long variety with fine, scaly netting on the skin, is the most widely grown and best known among this group.

Idaho is famous for the quality of its baking potatoes.

Pumpkins

Pumpkins are used in the U.S.A. at Halloween to make decorative jack-o'-lanterns.

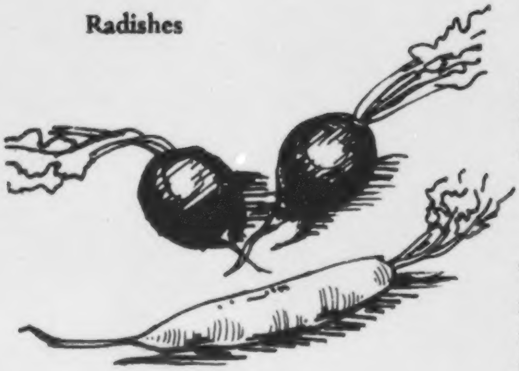
The pumpkin is another food more appreciated in Europe than in the United States.

Pumpkin's orange-colored flesh is mostly used in this country in the preparation of the filling of the popular pumpkin pie.

The beautiful orange color of the pumpkin flesh is always lost, due to the addition of the spices necessary to make pumpkin pie taste like . . . . pumpkin pie.

Pumpkins are, to the surprise of many to be sure, just another variety of squash.

Radishes



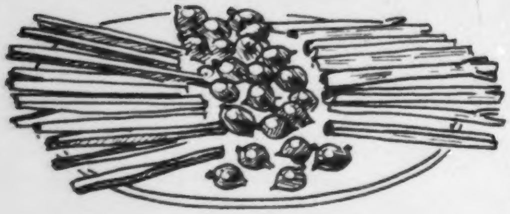
Radishes are of very ancient origin. They were cultivated first in China and Egypt, then in Europe, and later in America.

The most popular among the many species of radishes is the familiar red and white, small turnip-shaped vegetable served mainly on relish trays. The White Icicle radish has the same texture but appears quite skinless.

Black radishes are the size and shape of a large turnip or large carrot. The flesh is white, the peel is black, and the taste is really pungent. They have a much denser texture than red radishes. There are also some white radishes of the same nature.

Peeled, sliced or cubed, sometimes soaked in water and drained, they are served as an appetizer in some European countries.

Radishes can also be eaten cooked. Recipes for this use are found in old European cooking books.



In France, when radishes are served as an appetizer, they are accompanied by fresh butter.

Radishes have little nutritive value but are enjoyed by many as refreshing and appetizing tidbits.

Rice

Rice is one of the most important foods in the world. It is widely cutivated everywhere a warm climate and abundant water are found together. It is the principal food of about half the world's people.

Rice is the seed – or grain – of a cereal grass. In its natural state it is enclosed in a layer of bran surrounded by a brown husk.

White rice, the most common rice in American kitchens, is the grain itself rid of its bran, husk, and germ (embryo) by special machines. It is then polished by a process using talc to improve its appearance for marketing.

Brown rice, in relatively small demand, has the husk removed but the bran left on the kernel.

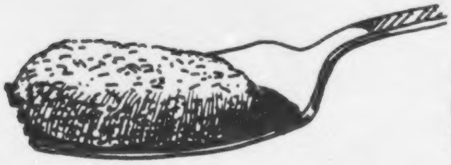
Brown rice is richer in nutritive value, since most of the rice vitamins are found in the bran and germ. However, enriched white rice is roughly equal to brown rice in most vitamins and iron, but not in vitamins E and K.

Wild rice is not actually a plant of the rice family. The grain is similar but darker and longer than brown rice. It is really, as its name indicates, a wild plant. It grows partly submerged along the margins of lakes. The difficulties of harvesting it account for its very high price.

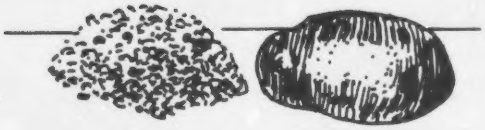
Wild rice as a food is handled and cooked the same ways as regular rice. It is usually served on special occasions and with wild game or fowl.

Different varieties of rice have different grain sizes. The longer grain is favored by many and therefore commands higher market prices. The Chinese prefer short-grained varieties that cling together after cooking.

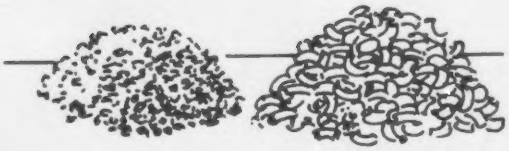
Rice should never be overcooked, and the grains should remain whole for an appealing, fluffy appearance. Overcooked rice is really a terribly unappetizing mess.



Rice is accepted by many as being a food of great nutritive value – a food that is particularly "good for you." While it does have a high caloric content, a great amount of its vitamins and fat are lost in the different processes of cleaning and polishing. It is very easily digested, however.



Comparing ½ cup of cooked *enriched* rice with a medium potato, the rice has more calories; most vitamins and minerals are roughly the same; but the potato has a substantial amount of vitamin C, which rice lacks entirely. Comparing equal *weights* of cooked enriched rice and cooked enriched macaroni, the rice is somewhat lower in protein and B-vitamins.



Because of its pleasant, mild flavor, rice is widely used in a great number of culinary preparations, including hot and cold dishes and a great variety of desserts.

Rice can be simply boiled or cooked as a pilaf.

Rice pilaf is prepared by first blanching the grains in hot melted butter, then simmering, covered, in just enough water or chicken stock to be completely absorbed when the rice is fully cooked but still firm.

Rice is easy to cook as a pilaf if one remembers that twice the amount of rice (by volume) is the proper amount of water needed.

Sauerkraut

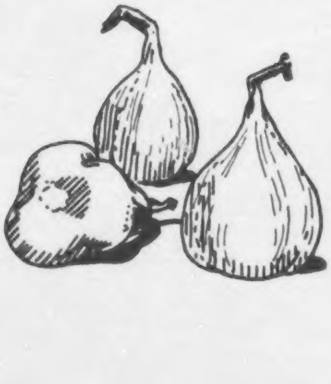
Sauerkraut is not actually a fresh vegetable. It is cabbage fermented in a brine made of its own juice and salt.

Sauerkraut originated in Eastern Europe, where it provided one way of keeping the vegetable through the winter without the need for refrigeration.

Sauerkraut can be eaten raw, but it is usually served cooked with pork, sausage, bacon, etc. – and for 5 or 6 hours, according to the "true recipe."

Sauerkraut juice is sold and used by a few who regard it as a valuable addition to their diet. Indeed, it does contribute some iron and vitamin C, as well as small amounts of other nutrients.

Shallots



The shallot is a small, pear-shaped, onion-like vegetable with a purplish-brown skin and a taste some describe as that of onion with a "touch of garlic." It separates into several individual bulbs.

Shallots are used in seasoning to give a more delicate flavor than onion.

After peeling, shallots can be kept a few weeks under refrigeration.

Soybeans

Originally from China and India, the soybean is now an immensely important commercial crop for its oil and its many industrial uses. It is also valuable as a crop for animals.

With the growing number of people interested in reducing their consumption of meat, the soybean as a vegetable has taken on new importance. It is even richer in protein than other shelled beans, either green or dry. Furthermore, the protein in soybeans is closer to a *complete* protein (such as is found in meat or milk) than the protein in any other vegetable.

Spinach

Spinach is the leaf of a plant of Persian origin, brought into Europe through Spain by the Moors.

Spinach can be eaten raw in salads or cooked. It is a wholesome food with laxative properties and a well-known reputation for its iron content. Although some other greens (dandelion greens, mustard greens) actually surpass spinach in iron, they are not readily available. Spinach is also a good source of vitamins A and C and calcium.

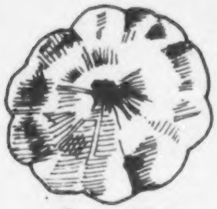
Like many other vegetables, spinach can be bought fresh in season or frozen or canned, either chopped or in leaves.

Meat, poultry, fish, and egg dishes in which spinach is an ingredient are often called Florentine (e.g., filet of flounder Florentine).

Squash

Yellow Crookneck

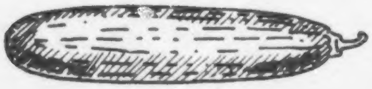
Squashes come in many different shapes, sizes, and colors. They nevertheless belong to the same botanical family.



Patty Pan

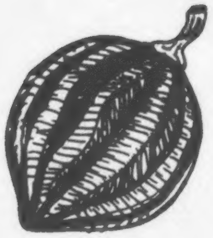
Squashes can be divided in two major groups: summer squashes and winter squashes.

Summer squashes include those varieties which are harvested while still immature, when the entire squash is tender and edible – flesh, skin, and seeds.



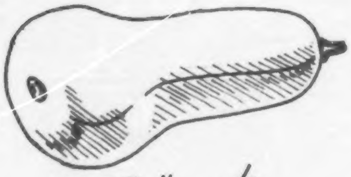
Zucchini

Summer squashes include: the yellow crookneck, yellow straightneck, the greenish-white patty pan, and the slender green zucchini and cocozelle or Italian marrow. New crosses among these, and other new varieties, are being produced by plant breeders.



Acorn

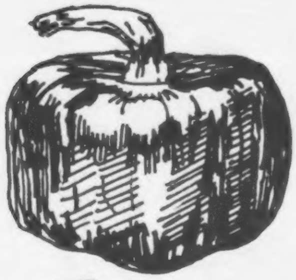
Fall or winter squash are those varieties which are marketed only when fully mature. The rind and seeds must be discarded. They keep quite well in a dry place at a temperature near 50°F.



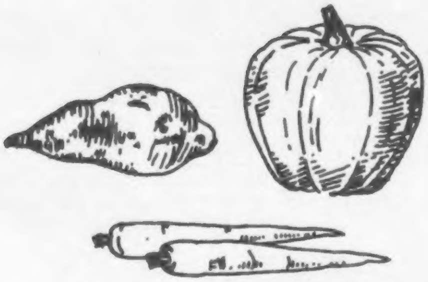
Butternut

Pumpkin

Fall or winter squash include the small, ridged acorn squashes, Butternut squash, Buttercup squash, Blue Hubbard squash, Golden Delicious squash, and the pumpkins.



Buttercup



Yellow and Orange Vegetables
a source of Vitamin A

Nutritionally, winter squashes are quite different from summer squashes. Winter squashes have more calories and much more vitamin A than the summer varieties, being an orange-colored vegetable.

Zucchini, a summer squash of Italian origin, has become quite a popular vegetable in the United States. It is for the most part smooth, cylindrical, and dark green in color, although a yellow zucchini has been developed.

Like other summer squashes, it is harvested unripe. It is very low in calories and is believed to have considerable diuretic and laxative action.

It is prepared in many different ways: sauteed, fried, stewed by itself, or combined with other vegetables as in the famous French ratatouille. It can even be served raw as a relish.

Sweet Potatoes

Sweet Potato Plant

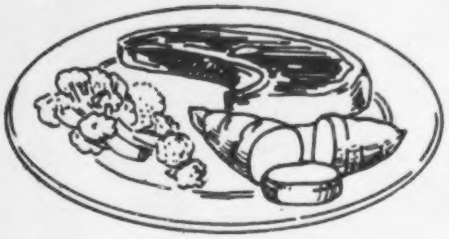
Sweet potatoes present a somewhat similar appearance to true potatoes and share some of the same characteristics, but they are not related in any way botanically.

Sweet potatoes, like white potatoes, are tubers that contain a high percentage of starch. In many Asiatic countries they are widely cultivated as a substitute for the common potato.

True Potato Plant

78

Nutritionally the principal differences between sweet and white potatoes is that, weight for weight, sweet potatoes have about half again as many calories as white potatoes; also, being yellow, the sweets are a good source of vitamin A.



In the United States, sweet potatoes are eaten primarily as a vegetable, although some desserts are made from them, especially in the southern states.

Two types of sweet potatoes are available in varying amounts the year round: the ordinary sweet potatoes, which cook up firm and dry, and the so-called yams (not "true" yams), which cook up soft and moist.

Yams usually have an orange-colored flesh and are particularly sweet.

Dry sweet potatoes have a pale flesh and are very low in moisture. Lack of demand for them has resulted in fast dwindling production.

Tomatoes

Tomatoes are the fruit of a vinelike plant of South American origin. In this country they were originally cultivated for the decorative effect of their bright red fruits, called love apples, which were generally thought to be poisonous!

The tomato plants now most widely cultivated bear large red fruits of up to 4 inches in diameter, but there are many varieties in other sizes and shapes: cherry tomatoes, plum tomatoes, pear tomatoes, etc. There are even yellow tomatoes.

Tomatoes are cultivated in most temperate regions throughout the world. California, Florida, and Texas are the main producers in the U.S., where production averages near 10 million tons annually. For good flavor, New Jersey tomatoes are at least very close to the top of the list, if not the very first.

Tomatoes grown locally have a better flavor than those shipped in, since the fruit is allowed to ripen on the vine.

Green tomatoes can be matured by letting them remain at room temperature. Light is not necessary to ripen them. Good-quality tomatoes should not be refrigerated, or they develop a mealy taste. Refrigerate them only if they are getting overripe.

Tomatoes are fairly high in minerals and vitamins. Their well-appreciated taste has led to their use in the preparation of an infinite number of cold and hot dishes, from tomato juice cocktails to pizza.

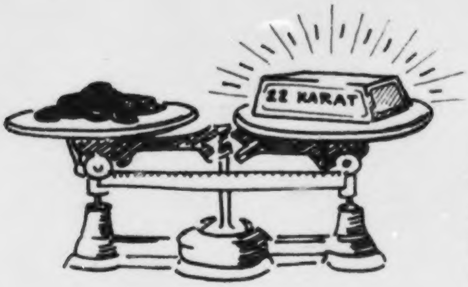
Truffles

Truffles are found principally in France and Italy.

Truffles, like mushrooms, are the fruiting bodies of a type of fungus. But they grow underground in the vicinity of oak tree roots.

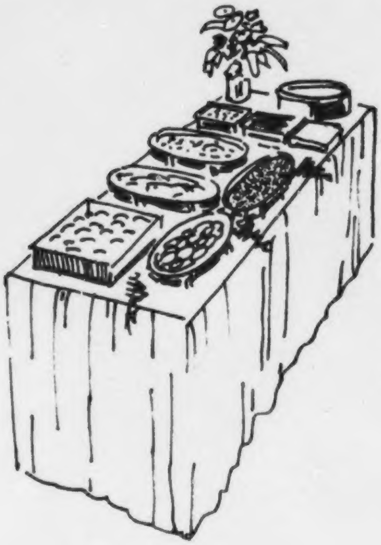
Truffles are always white when young. At maturity, their flesh becomes darker with a marbling of lighter tissue, and of finer grain.

They are located by the use of trained dogs and pigs.



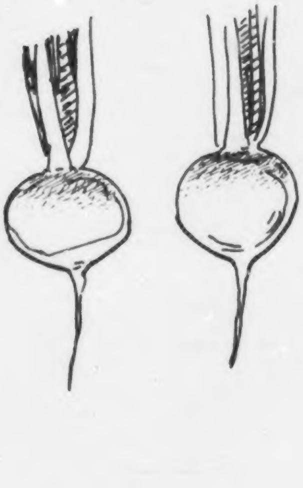
A variety of white truffle is found in Italy only and is of a very pungent flavor. Very scarce, they are esteemed enough by connoisseurs to command prices reaching three and four hundred dollars per pound!

Truffles are used mostly as a flavoring in the preparation of sauces and French specialties such as the famous goose liver paté of world-wide reputation – pâté de foie gras.



The texture and color of the truffles make them useful in the decoration of foodstuffs.

Turnips



The turnip is a member of the large mustard family. The most popular turnip has white flesh and a purple top and is available all year round.

A close relative of turnip is the rutabaga. This vegetable is larger and finer grained. Rutabagas sold loose are often coated with paraffin (wax) to prevent their drying out.

The turnip is a pot vegetable of European origin. Turnip flesh has the property of absorbing a large amount of fat, and it adds a lot of flavor to soups and stews.

Many people, particularly southerners, appreciate turnip greens, which are chock full of just about every vitamin and mineral necessary to health. A cup of cooked turnip greens even supplies almost as much calcium as a cup of milk.

Watercress

Watercress was believed by the early Greeks to be a cure for insanity. They also thought that a drinker who nibbled the leaves while drinking would stay sober.

Watercress is a small, round-leaved plant that grows naturally along the banks of fresh-water streams and ponds. It may also be cultivated in similar situations, and is much grown in moist, sandy soil in greenhouses.

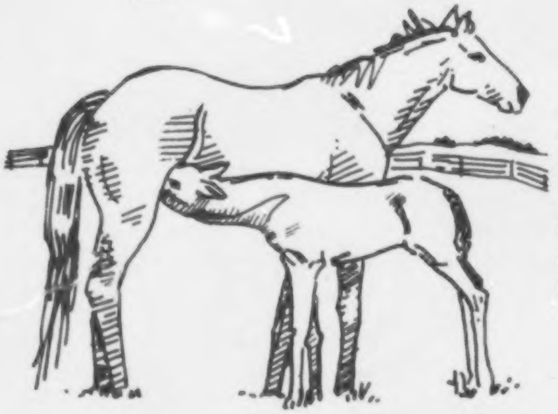
Watercress is prized as an ingredient of mixed green salads and as a garnish, because of its spicy flavor.

Watercress, like all dark green leaves, has a very high vitamin A content.

Watercress should always be washed very carefully and kept refrigerated. It is highly perishable.

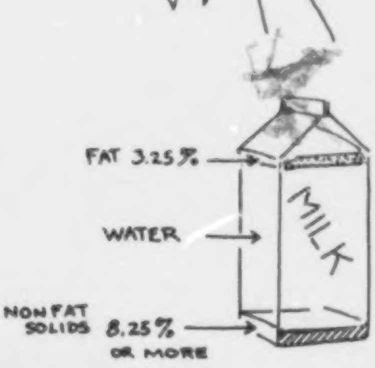
DAIRY PRODUCTS

Milk



Milk is secreted by the mammary glands of all animals in the mammals class. This class includes all animals that nourish their young with milk and that have skins more or less covered with hair. Mammals range from mice and bats, through countless wild and domesticated animals, porpoises, whales, elephants, and human beings.

Milk has great nutritive value. It is the nearest to a perfect food that we have. A quart of milk provides about 650 calories. Milk is the most important source in our diets of the vital mineral calcium. It is also rich in high-quality protein, fat, and the B-vitamin riboflavin, and has smaller amounts of most other vitamins and minerals.



By law fresh fluid milk must contain at least 3.25% milkfat (butterfat) and 8.25% nonfat milk solids.

Milk is fairly easy to digest, especially for children, and is a valuable "internal antiseptic" because of the lactic acids formed by the action on milk of the digestive juices in the intestines.

Milk, although a liquid, should always be regarded as a food rather than a drink.

Milk should not be gulped down like water. Drunk slowly, it will coagulate in the stomach in small curds that are easily digested. Drunk too fast, it will form a large, difficult-to-digest mass in the stomach.

Homogenized milk is whole milk that has been put through a process that breaks up all the fat globules into smaller ones. The fat particles are then so small that they do not rise to the surface. Homogenized milk has a better appearance than unhomogenized milk, and a somewhat creamier taste.

Pasteurized milk. Almost all fresh milk and cream on the market is pasteurized to protect the consumer. This means that disease-causing bacteria have been killed by a heat-treating process.

Evaporated milk has had its water content reduced by evaporation in a vacuum. It is sold in cans and has the consistency of light cream. By law it must have at least 7.5% milkfat and 25.5% total milk solids (including the fat).

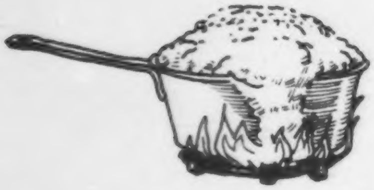
Condensed milk has been evaporated further and has had sugar added. It is extremely thick. By law it must have at least 8.5% milkfat and 28 percent total milk solids (including the fat).

Skim milk: milk from which practically all the fat has been removed. Nutritionally it is equal to fluid milk except for the fat and for vitamins A and D (fat-soluble vitamins).

SHIELD ON U.S. GRADED NONFAT DRY MILK

Nonfat dry milk is produced by removing about 95% of the water from skim milk. Dry milk keeps very well at room temperature. This milk conserves all its nutritive properties and is used extensively in commercial kitchens.

Whole dry milk is made by removing most of the water from whole milk. It has all the nutrients of whole milk, including the fat and vitamin A.



Milk should not be heated directly over high heat, because it scorches easily and is likely to boil over, resulting in waste and a clean-up job. A double boiler is the best way to heat up milk.

Milk that curdles separates into two parts, the whey or liquid part, and the curds or semi-solid part.

Curdling results when casein, one of the proteins in milk, coagulates (clumps together, forming a semi-solid material). This is usually caused by acids in foods, although a high salt content or certain other substances in foods can produce curdling. Sometimes too high a heat will produce curdling.

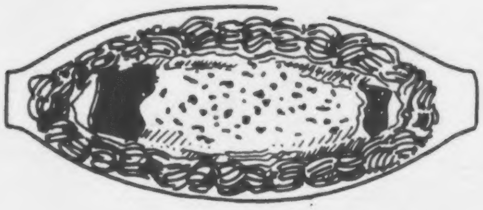
Any procedure that keeps the protein from clumping together will keep a milk-mixture smooth. Constant stirring while adding a vegetable; preparing the milk in a white sauce; adding a vegetable shortly before serving, and heating briefly – these are some of the ways curdling can be prevented.

Milk curds are used in the making of cheese, either fresh or cured.

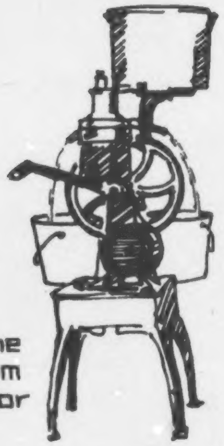
Fresh milk should always be stored at a temperature as close as possible to 34°F.

Buttermilk is made by adding a bacterial culture to skim milk or lowfat milk. It has a thick, smooth body and an acid flavor.

Yogurt is another milk product produced with the help of a specific bacterial culture. It may be made from skim milk, from skim milk with added milk solids, or from whole milk. It has a semi-solid body and characteristic acid flavor.



Cream is used in commercial kitchens in the preparation of many fancy dishes and sauces. It is also used with coffee, although it is often replaced by a mixture of milk and cream called half and half.



old-time cream separator

Cream contains the butterfat of the milk. The cream rises to the surface of unhomogenized milk because the fat is lighter than the liquid milk. It can then be removed.

Nowadays the separation is done in large machines called centrifuges, which operate in much the same manner as the spin-dryer of an automatic washing machine. The "skim" milk, being heavier, is driven to the outside; the lighter cream remains in the center, and the two are drawn off separately. Between 30 and 40 percent of heavy whipping cream is butterfat.

Light cream or coffee cream contains about 20 percent butterfat. This is the cream usually used in cooking.

Sour Cream: cream with 18 percent fat, soured by the addition of a culture of lactic acid bacteria.

Sour cream is used in cooking (e.g., Beef Stroganoff), in salad dressings, with baked potatoes, and in baking.

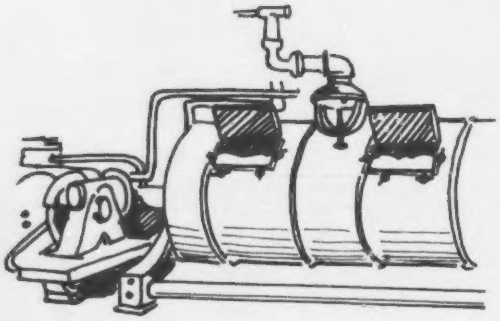
Butter

Butter is the fat removed from the milk of mammals. It has been known and used as food for humans since the most ancient times.

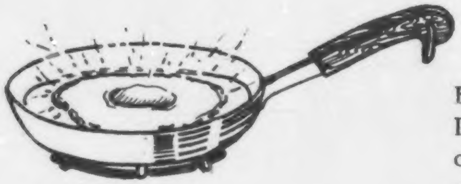
Early nomadic people prepared butter by using the milk of cows, ewes, goats, mares, she-asses, and even she-camels.

In ancient India, people considered butter a sacred food.

The Hebrews also knew butter and used it not only as a food but also as a medicine.



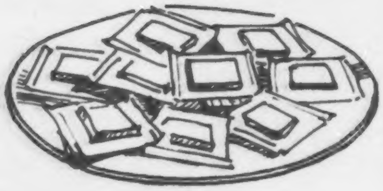
Butter is made by churning cream. The fat globules are clumped into a compact mass by subjecting the milk to a series of repeated shocks by agitating a large tankful of cream. The crude butter is then worked and washed with water to remove as much as possible of the milk curd and other nonfat substances. Finished butter must contain no more than 16% of water, and no less than 82.5% of butterfat.



Butter is preferred to other animal fats in cooking. Its flavor is more delicate than that of vegetable oils, and many chefs feel that the flavor of butter cannot be surpassed by that of any other fat or oil.

Sweet butter, in the United States, only means fresh butter with no salt added.

Salted butter is marketed extensively in the U.S.A. It contains a small amount of salt used for preservation.



Butter pats are sold to hotels and institutions in 30-lb. boxes containing six 5-lb. cartons.

Solid butter sold in pound packages (usually 30 lbs. to a case) is referred to as print butter.

Butter is often mixed, half and half, with margarine for sauteing or shallow frying, because pure butter has a tendency to brown and burn faster than margarine.

Cheeses

The story of cheese is a fascinating one. In prehistoric times, it is said, a trader from Arabia was traveling in a mountainous section of Asia. He paused to refresh himself with dried dates and goat's milk. Out of the canteen from a dried sheep's stomach, only a thin watery liquid trickled. Cutting the skin to see what had happened, he found a soft mass of curd not at all distasteful to a hungry man. The renin in the sheep's stomach had curdled the milk, and the result was cheese. Today we make cheese in exactly the same way – by curdling the milk with rennet prepared from a calf's stomach.

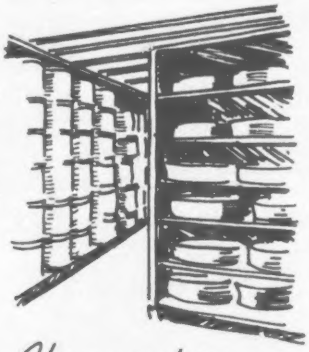
Cheese was introduced into Europe by Asiatic traders more than 2,000 years before the birth of Christ. The Greeks and Egyptians sang of its virtues. The Hebrew David presented 10 cheeses to his captain as the finest of delicacies.

Distinctive types of cheese are developed all over the world. Many of these are minor variants of the major types, of which there are considered to be about 18. An almost unbelievable range of flavors and textures is produced by skillful fermentation and control of conditions.

Cheeses can be classified into two broad categories: cheeses eaten before fermentation of the curd and cheeses left to ferment before consumption. The fermented cheeses may be soft-ripened, semi-soft ripened, firm-ripened, and mold-ripened.

Letting the whey run off

Firming up



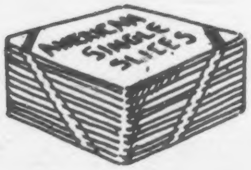
Cheeses in boxes stored for slow ripening

Dry-curd cottage cheese is a soft, uncured cheese made from skim milk with the addition of a special bacterial culture and sometimes a rennin enzyme. It contains less than 0.5 percent butterfat and not over 80 percent moisture.

Cottage cheese is made the same way as dry-curd cottage cheese, but cream is added. It contains not less than 4 percent butterfat and not over 80 percent moisture.

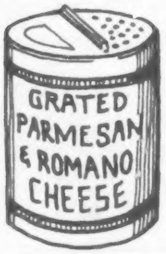
Cream cheese is made from cream-enriched milk and averages about 1/3 butterfat.

Natural cheeses are made directly from milk with no further processing.



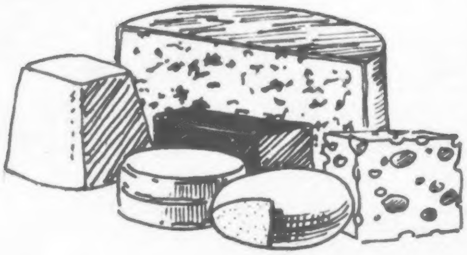
Pasteurized process cheese is a blend of fresh and aged natural cheeses which have been shredded and mixed with emulsifiers and heated (pasteurized). It melts easily when reheated.

Cold pack or club cheese is a blend of fresh and aged natural cheese, as in process cheese, except the cheese is mixed into a uniform product without heating.



Grating cheese. Any ripened hard-type cheese, usually the hard Italian types – Parmesan, Romano, Asiago, and Provolone. The cheese is ground, grated or shredded, and dried. It is used as a condiment in cooking.

American cheese. A general term often used to include Cheddar, Colby, granular or stirred-curd, and washed-curd cheeses. Sometimes Monterey or Jack cheese is included in this group.



In addition to these American cheeses, popular hard cheeses include: English Cheshire and Stilton, Dutch Edam and Gouda, Swiss cheese and its French version Gruyère. Among the soft cheeses are Brie, Camembert, Neufchâtel, and Limburger. Roquefort is a semi-soft cheese made in France from sheep's milk.

Slices and pieces of cheese are often used in salads and in cooking, e.g. swiss cheese, cheddar, etc.

Care must be taken when cooking cheese. Too much heat and too long cooking cause the fat to separate and leave a tough, rubbery product.

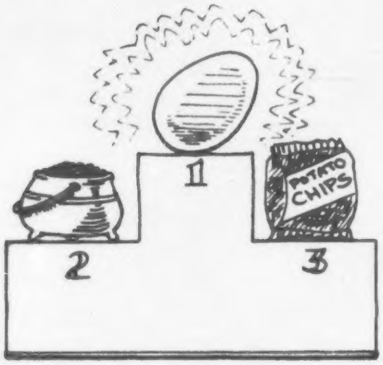
Cheese, in Europe more than in the United States, is often eaten at the end of meals. In France a meal without cheese is an incomplete meal.

Eggs

The eggs of birds, fish, and even reptiles can all be used as food. Hen's eggs, however, are almost the only ones eaten by people in this country.

Caviar and shad roe are fish eggs.

Eggs are very nutritious and are particularily important during growth. Eggs may have been the best protein source for humans since the dawn of history.



Egg protein is so near perfection that scientists often use it as a standard when measuring the value of the protein in other foods. Eggs also provide important amounts of iron, vitamin A, and riboflavin, and they are one of the few foods that contain natural vitamin D. They contain smaller amounts of other vitamins and minerals also.

CHOLESTEROL-RICH FOODS

Brains
EGG YOLK
Caviar
Fish Roe
Kidney
Liver
Sweetbreads
Oysters

In recent years, eggs have lost some of their popularity due to their particularly high cholesterol content. Cholesterol is now known to be a factor in cardiovascular diseases. Since the human body also makes its own cholesterol, no final answer has at this time been reached as to how harmful a high-cholesterol diet is. Nevertheless it is probably advisable for most people to limit the intake of eggs.

Eggs are preserved by exclusion of air. At one time eggs were dipped in a solution of "waterglass," drying into a hard, glassy film.

Today, refrigeration in storage, transportation, and on the local premises is so good that the consumer can be assured of egg quality and freshness.

Eggs are sometimes preserved by drying into powder. The product obtained is far inferior to that of the fresh egg – according to anyone having served time in the armed forces. Dried eggs are useful, however, in cooking, most particularly baking.

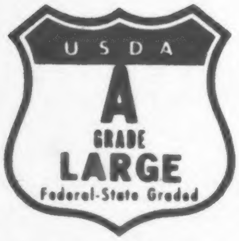
Frozen whole eggs and frozen yolks and whites are also much used in commercial baking.

Eggs are sold wholesale in crates containing 30 dozen, arranged on 12 sheets holding 30 eggs each.

Eggs are classified commercially by size: extra large, large, and medium.

The average weight of a large egg is 2 ounces.

There is a Federal grading program for shell eggs. It is not compulsory, and a farmer desiring to have eggs graded by the U.S. Department of Agriculture must pay a fee.



SHIELD GIVING QUALITY AND SIZE OF FRESH EGGS

The three consumer grades are U.S. Grade AA (or Fresh Fancy), U.S. Grade A, and U.S. Grade B. The grade you will find most often is U.S. Grade A. Often, AA quality eggs are included in the cartons with A quality eggs.

U.S. Grade AA (or Fresh Fancy) and U.S. Grade A eggs have a round, firm yolk, and a high, thick white when broken out. They are ideal for all purposes, but especially for frying and poaching where their up-standing appearance is important.

Grade B eggs have a less thick white, and the yolk may be somewhat flattened. They are good for general cooking and baking.

Grading, sizing, labeling, and packaging of shell eggs are controlled on a state-by-state basis in accordance with the various state laws.

Size and quality of eggs are not related. Nor is there any relationship between color of shell and quality.

Eggs are used in an infinite number of culinary preparations:

Raw, in mayonnaise, etc.

Coddled, in Caesar salads, etc.

Soft-boiled for breakfast.

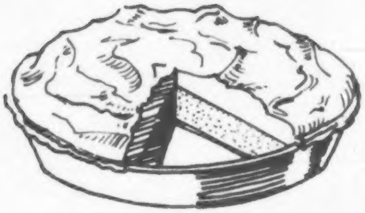
Hard-boiled in many dishes, hot and cold.

Fried for breakfast.

Poached for breakfast or in sauces for luncheon entrees.

Whipped for omelettes.

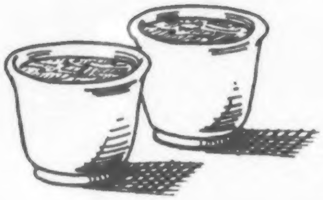
Baked in special dishes called cocottes, either for breakfast or lunch.



Egg whites can be whipped separately to give a light foam which, mixed with sugar and baked, gives the well-known meringue.

Raw egg or partially cooked egg cannot be left at room temperature for more than two hours without risking spoilage due to possible presence of the bacteria called Salmonella. (Salmonella are one of the most frequent causes of common food-borne illnesses, such as upset stomach and more serious food poisoning.)

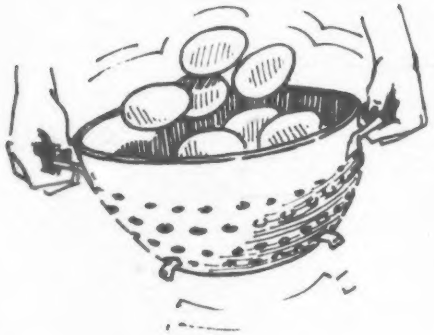
Use only clean eggs with sound shells in any recipe in which eggs are not thoroughly cooked, such as egg-milk drinks, soft-cooked eggs, poached eggs, scrambled eggs, omelets, uncooked salad dressings, ice cream, meringues, soft custards, or puddings cooked on the top of the range.



Cracked or soiled eggs may contain harmful bacteria. They should be used only in foods that are to be thoroughly cooked, such as baked goods or foods cooked for a long time on the top of the range.

Hard-boiled eggs are usually cooked by the use of the steamer in commercial kitchens. Fifteen minutes is the average time of cooking.

Hard-boiled eggs are easier to shell if they are cooled immediately after cooking under running cold water. When the eggs are slightly cooled, it is a good procedure to place them in a colander and, by holding the colander by the two handles, to throw the eggs up (don't overdo!) a few times. The shells of most of the eggs will crack and, when returned to the water, will be very easy to peel.



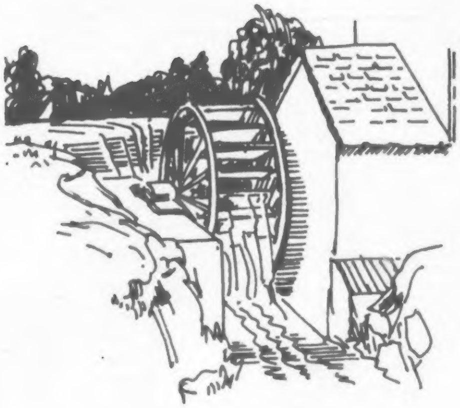
OTHER COOKING STAPLES

Flour

Flour is the finely ground meal of wheat or other cereals such as rye, barley, rice, and corn. There can be other flours also – potato, soybean, etc. **Meal** is coarsely ground flour.

The milling of grain for flour dates back to prehistoric times. From the hand-grinding of early civilizations, milling has developed through the ages into an enormous industry today.

There is evidence that wheat and corn were crushed and used as food at least 6,000 years ago. Pounding stones and special vessels have been discovered in archeological diggings in England, Switzerland, and elsewhere.

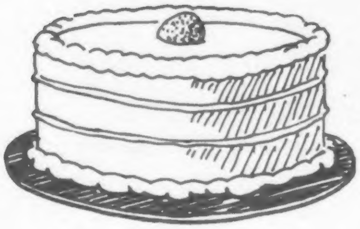


The water-propelled grist (grinding) mill was invented around the time of the birth of Christ and was used thereafter for many centuries.

Windmills first appeared in Europe at about 1300 and were widely used until the invention of the steam engine.

Fresh-milled white flour is pale yellow and only becomes white with aging. To speed this natural process, most mills today use a chemical agent (bleaching), which is rigorously controlled by the government.

Bread flour: This flour is milled from hard wheat and contains gluten, the elastic, protein substance so important in bread- and roll-making.



Cake flour: This flour is milled from soft wheat and contains no gluten. This flour should not be used in making sauces, because it is more likely to form lumps.

All-purpose flour: This is a blend of hard- and soft-wheat flours. It is used mostly by housewives for baking and cooking. It is nevertheless used also in commercial kitchens, but rarely in bakeshops.

Pasta flours are milled from a very hard wheat called durum wheat. It is generally used for noodles, macaroni, and spaghetti.

Thickening Agents:

Thickening agents are added to soups, sauces, gravies, and stewed meats and stewed vegetables for better consistency. Most thickening agents are starches.

Flour is the most commonly used thickening agent. When cooked with fat to make a roux, it makes an excellent thickener that holds up well under constant heat without breaking down.

Arrowroot: This is the starch obtained from a small tropical American plant called arrowroot. (The name comes from the Indians, who used to rub their arrow tips with the leaves of the plant, which contain a poisonous substance.) Arrowroot is expensive, and its use is usually limited to certain culinary items that call for a high gloss.

Cornstarch: This is a starch in the form of white flour made from field corn. Cornstarch is rather inexpensive. It is suitable for many preparations where thickening is desired. Cornstarch not only thickens but also gives a glossy, semi-clear finish to a product.It is used a lot for sweet sauces.

Whitewash is a mixture of equal parts of flour and cornstarch in water. It is poured slowly into the boiling liquid to be thickened (stew, fricassee, etc.) while stirring.

Pre-gelantinized starch: This is a mixture of different starches blended with sugar. The starches have been precooked and require no additional heat to absorb liquid and gelatinize. Such a starch is used in the powdered "instant puddings." It can be added to a liquid for instant thickening.

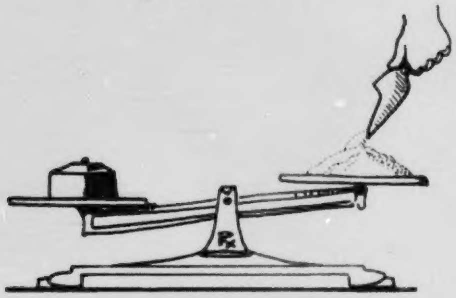
Sugar

Sugar is a sweet substance found in many different plants. There are a number of different types of sugars found in plant tissues, and animal tissues as well.

The commercial sugar is *sucrose*. It is made from sugar cane, sugar beet, or the sugar maple tree.

Many will be surprised to learn that sugar was not known in Europe until the end of the 17th century. From ancient times till then, honey was the main sweetener.

It is believed that sugar has been known in India for thousands of years. Crystallized sugar began to be brought from the East to Europe at the beginning of the 18th century.

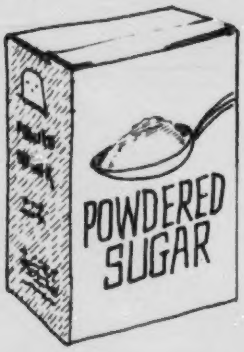


When crystallized sugar became available in Europe, it was first sold only in pharmacies, being considered as medicine. Sugar was then so expensive that it was sold by the ounce.

Sugar had to be imported into Europe because at that time it was processed only from sugar cane, and the European climate did not permit its cultivation.

During the blockade of France by the English at the beginning of the 19th century, Napoleon encouraged further research on a discovery made a few years earlier by a German and a French scientist. These scientists had found sugar in beet juice. Their discovery led to development of a big European industry: the manufacture of sugar from beets. Thus the European continent was freed from dependence on the East and the New World for its sugar.

Beet sugar was for some time thought to be inferior to cane sugar, until a French scientist, Chaptal, proved by experiment that beet sugar was identical to cane sugar.



Sugar is sold crystallized to different degrees of fineness, including powdered. It is also sold in small cubes.

Superfine sugar is a name accepted for finely crystallized sugar treated to dissolve almost instantly in liquids.

Granulated sugar is 99.5% carbohydrate. One level tablespoon of sugar yields 46 calories. White sugar has no protein and no minerals or vitamins.

Sugar is a very concentrated foodstuff which is readily absorbed and does not leave any residue.

Due it its rapid digestion and absorption by body tissues, sugar restores energy very quickly in people exhausted by fatigue, but only for a limited time.

Sugar is not much used in cooking other than baking. It is used in a few sweet-and-sour dishes, and a small amount is sometimes added to tomato preparations when the tomato is rather tart.

HOME RUN FRANKS
INGREDIENTS: BEEF, WATER, PORK, SALT, CORN SYRUP SOLIDS, SPICES, DEXTROSE, SODIUM NITRATE, SODIUM NITRITE

Sugar is widely used, however, in processed foods, particularly frankfurters, sausages, bacon, etc.

Molasses is the thick syrup, dark to light brown, that is separated from raw sugar in the refining process.

Brown sugars are refined sugars, but the refining is done at a lower temperature, and the sugar contains some molasses and more moisture than white sugar. The darker the sugar, the more molasses and moisture.

Oil

Oil is a fat that is liquid at room temperature; "fat" is solid at room temperature. Oils and fats are the only foods we eat that contain no water!

Generally, oils come from vegetable sources and fats from animal sources. However, oils will become solid at room temperature if treated by a special process called hydrogenation. The canned shortenings much used in baking consist of hydrogentated oils.

Oil does not mix with water but can be emulsified, as in mayonnaise, french dressing, etc., and made to stay distributed throughout the product.

Cottonseed oil: oil extracted from cotton seeds. Now that oil can be purified and rendered colorless, it is used in cooking. Nevertheless it is used mainly as an ingredient in the manufacture of margarine and commercial shortenings.

Peanut oil: an oil extracted from peanuts. Its taste is very mild – some say it is tasteless – and it has almost no odor. Peanut oil is used extensively in the commercial and home kitchens. Most Chinese chefs use only peanut oil in their cooking.

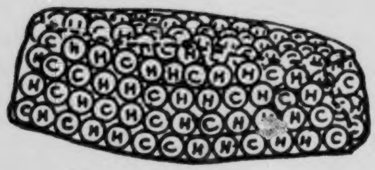
Olive oil: oil made from olives. Many people think olive oil is the only edible oil worth using.

Olive oil comes in different grades. The best and most expensive is obtained by the pressing of fresh ripe olives. Its color is greenish, and it will keep fresh for a long time. Lower grade oil is extracted by pressure under heat. It is white in color and, when exposed to air, becomes rancid more rapidly.

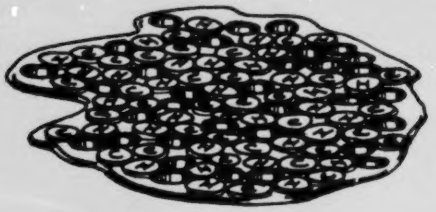
Walnut oil: An oil extracted from walnuts without heat. Its full, nutty flavor is appreciated mostly by the people living in the country districts where it is produced.

Oil is used extensively in cooking. Many chefs feel, however, that oil is a poor substitute for good, fresh butter.

On the other hand, many scientists working in the health field have come to the conclusion that oils are much better for health than solid fats.

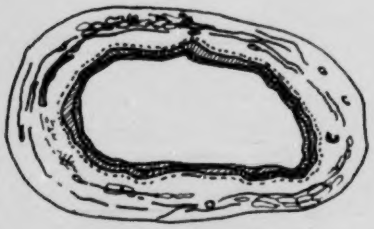


All fats and oils are complex in their makeup, consisting of a variety of fatty acids of different types. When a fat is *saturated,* the fatty acids are combined with all the hydrogen that it is possible for them to hold. Most animal fats, including those in milk, butter, and eggs, consist to a large extent of saturated fats.



Unsaturated fats carry less hydrogen. *Poly*unsaturated fats have *two or more* places in their structure that lack (and can take up) hydrogen. Examples of mostly polyunsaturated fats are corn oil, cottonseed oil, soybean oil, safflower oil, and the oils in fish.

Olive oil, peanut oil, and hydrogenated shortenings are close to neutral in their balance of saturated and polyunsaturated fatty acids. Coconut oil, however, is almost entirely saturated. (This is the oil used in most non-dairy creamers and other substitutes for dairy products.)

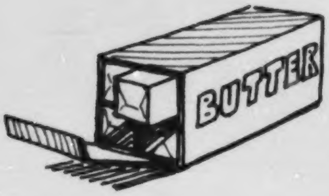


CLEAR ARTERY

Saturated fats in the diet tend to raise the level of cholesterol in the blood; in many people this builds up waxy deposits of cholesterol in the arteries. These deposits narrow and harden the arteries and may lead to circulation problems and heart attacks.

BUILDUP OF DEPOSITS
IN ARTERY

Polyunsaturated fats tend to prevent this buildup, and can even partly reverse the clogging and thus reduce the risk of heart disease. This is the reason why nutritionists suggest using oils rather than butter in cooking.



HIGHLY SATURATED

HIGHLY
UNSATURATED

A rough "rule of thumb" (with certain notable exceptions) is that the more solid the fat is at room temperature, the more highly saturated it is likely to be.

Margarine

Margarine is a food product, manufactured to resemble butter, but now made from vegetable oils (partly or wholly hydrogenated) and skim milk or nonfat milk solids. It is a water-in-oil emulsion and must by law contain 80% fat.

Margarine was first made in France in 1870, when Napoleon III offered a prize for a butter substitute. The first margarines were made from beef fat. They were introduced in the United States in 1874. At first the product was called oleomargarine.

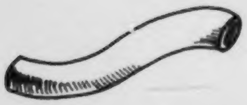
Margarine is almost white in color. It is mixed with a yellow vegetable dye to acquire its butter-like appearance.

Margarine is marketed like butter, in solid pounds or in pats. In the retail market it is found in pound boxes of four bars, or as soft margarine in tubs.

The nutritional value of margarine is roughly the same as that of butter except for its lack of vitamin A. Vitamin A is added today in practically all brands of margarine. A much smaller proportion of the fat in margarine is saturated, however. Being made of oil rather than animal fat, margarine has no cholesterol and a better ratio of polyunsaturated to saturated fats. Below is a chart comparing the average butter with average soft and firm margarines, and for comparison, three types of oils.

	Calories	Cholesterol (milligrams)	Saturated Fatty Acids (grams)	Polyunsaturated Fatty Acids (grams)
Butter – 1 tbsp.	100	35	7	Trace
Stick margarine – 1 tbsp.	100	--	2	3
Soft (tub) marg. – 1 tbsp.	100	--	2	4
Corn oil – 1 tbsp.	125	--	2	8
Soybean oil – 1 tbsp.	125	--	2	8.5
Coconut oil – 1 tbsp.	125	--	13	Trace

Pasta


MACARONI

"Pasta" is a word borrowed from the Italian language and is the collective name for all kinds of noodles and macaroni. (Shells, lasagna, elbow macaroni are pasta, just as tomatoes, peas, and eggplants are vegetables.)

SPAGHETTI

LINGUINI

Pasta includes a great variety of shapes and sizes. The types used most often in the United States are macaroni, spaghetti, vermicelli, shells, lasagna, linguini, and ravioli.

VERMICILLI

SHELLS

Other pasta products are available in Italian stores under such names as: mostaccioli, manicotti, tagliatelle, fettucine, crescioni, fedelini, strichetti, tortellini – to mention only a few.

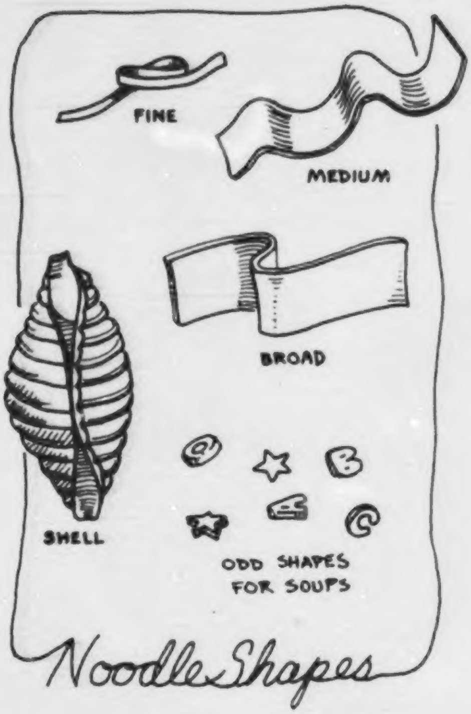
LASAGNA

Pasta is made from the flour of a hard-grained wheat called durum wheat, which is one of the higher protein wheats.

RAVIOLI

Pasta is made with a simple dough of flour and water and shaped into the desired form by pressing the dough through special tubes or perforated plates. A fan is usually placed near the outlet of the die to begin the drying process, which ends in the drying oven.

Eggs, fresh or powdered, are often added to the basic pasta dough for a product of better quality.



Noodles are always made with eggs and are generally shaped in ribbon form, although noodle shells are also popular. A few small special shapes are also manufactured, principally for use in soups.

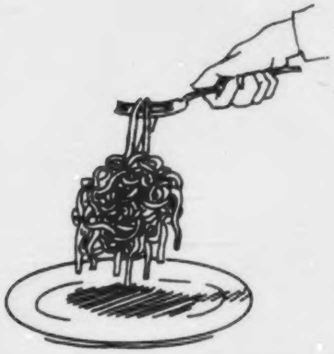
Most of the pasta on the market today is enriched with iron, thiamin, riboflavin, and niacin to increase its nutritional value.

Pasta apparently originated long ago in the region occupied today by Italy. It has been a staple food in this country for centuries.

Pasta is enjoyed by many in all parts of today's world. It is a relatively cheap food lending itself to the preparation of an endless number of cold and hot dishes.

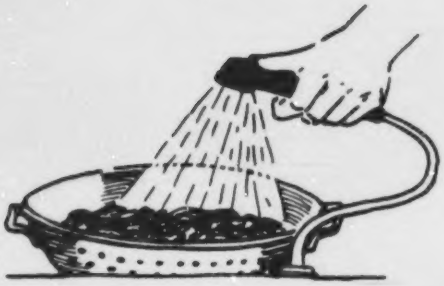
All types of pasta should be cooked in a large amount of properly salted water, brought to a rolling boil before the pasta is added. It should be stirred several times while cooking.

Some professional cooks believe that a little oil added to the cooking water will prevent the pieces from sticking together. Some others differ, feeling the oil has no value.



Pasta should never be overcooked. An overcooked pasta is one of the worst things to serve and eat.

Pasta is usually preferred cooked "al dente," an Italian expression meaning "for the tooth," implying a firm pasta that offers some resistance to the teeth.



Pasta should be washed under cold running water immediately after cooking. Carefully drained, it should be then stirred gently with a little melted butter to prevent sticking.

Pasta is often cooked to order in better eating places, where patrons are glad to wait the necessary time in order to be served a perfect pasta.

Cooking time required for pasta varies a great deal according to type – size and shape – of the pasta.

The only way to check the doneness of a cooking pasta is to retrieve a small sample and actually test it by chewing.

Herbs, Spices, and Condiments *

Herb?

Spice?

Condiment?

"Herb," "spice" and "condiment" are three words used almost interchangeably. There are, however, some subtle differences in meaning.

Both herbs and spices are parts of growing plants used to give extra flavor to foods.

The term "herb" more often refers to leaves, flowers, and other growing parts, used either fresh or dried, as parsley, oregano, basil, chives, bay leaves, etc.

"Spices" more often refer to dry plant parts, particularly seeds, with very pronounced flavor. Examples: pepper, cloves, nutmeg, etc. There is no sharp distinction, however, between the two words. In general, both herbs and spices are used in cooking or preparing foods.

The term "condiment" – although also referring to a seasoning for food – is generally preferred to identify various seasoning substances placed at the table for the customer to use. Condiments would include salt, pepper, sugar, catsup, soy sauce, etc.

All substances used as condiments – with the exception of salt – are of vegetable origin.

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* Most of the illustrations of spices were furnish by: American Spice Trade Association, Empire State Building, New York, N. Y. 10001

The moderate use of spices is thought to stimulate the appetite. They certainly make food more *appetizing.*

Spices and herbs are as old as civilization. They are mentioned in the Bible, in books dating from antiquity, and in medicine books of ancient times.

In early times, with no refrigeration or primitive refrigeration, food spoiled very quickly. Spices were much sought after because their pungent taste could not only improve the flavor of food, but could disguise the taste of spoiled or spoiling food.

World travelers and early explorers like Marco Polo brought many exotic spices back from the East and introduced them to Europe.

The popularity of some of these spices became so great that enterprising men risked their lives in long journeys to faraway places to bring back and sell the precious herbs – for many times their weight in gold!

The discovery of America was partly due to the demand in Europe for exotic spices. Businessmen of those times hoped to find a shorter route to India and the Pacific Islands, where these invaluable commodities could be found.

The proper use of spices is essential to good cooking. Mastery of this real art only comes with patience, practice, and also a measure of common sense.

Seasoning with spices should be done progressively, evaluating the result of each addition by careful tasting.

With a few exceptions, no single spice should predominate in the taste of a finished culinary preparation.

Herbs and spices are most often used in their dry form. Many may be purchased whole, flaked, or powdered. It is relatively difficult to find fresh herbs in American stores. Many housewives, however, grow a variety of common herbs in small gardens or even on window sills.

Following is a list of the spices and herbs most commonly used in home and commercial cooking.

Allspice: This spice is the dried unripened berry of a small tree related to the clove tree, cultivated in the West Indies. It is so named for its taste, which seems to combine the flavors of cinnamon, nutmeg, and cloves. It is mistakenly assumed by many that allspice is a blend of different spices.

Anise: Anise is a spice suggesting the flavor of licorice. It is used almost exclusively in baking and confectionery-making.

Basil: Basil is the dried leaves, flowers and stems of a plant of Asiatic origin but grown today in Europe and America. Basil is used frequently to season tomato preparations, vegetables, and egg dishes.

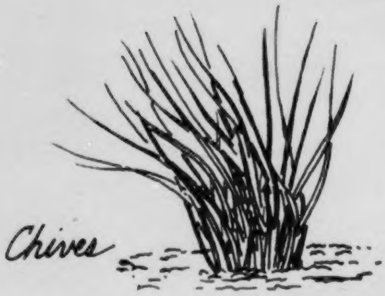
Bay leaves: Bay leaf is the leaf of a tree of the laurel family grown in Mediterranean countries. Bay leaves are sold whole after drying. They should be removed from the preparation before serving. Bay leaves are used as flavoring in soups, meat and vegetable stews, gravies and sauces, and in pickling different foods.

Cayenne pepper: This spice is the hottest of all peppers. It is ground from the small pods of certain varieties of hot peppers. It is of a duller red than red pepper, but much hotter. Extreme caution should be used when seasoning with cayenne pepper. It does not take much to render a dish inedible.

Celery seed: This spice is the very small, brownish seed of a wild variety of celery. Celery seeds have a taste very close to the taste of the celery stalks commonly used as a vegetable. Celery seed can be added to virtually all food preparations and is much appreciated in salads such as potato salad and cole slaw.

Chervil: Chervil is an herb grown in England, Northern Europe and the United States. It has a delicate flavor reminiscent of parsley. Chervil does wonders for salads and is also used, though less often, in soups and egg preparations.

Chili powder: Chili powder is a blended spice consisting of cumin, red pepper, oregano, and other spices according to the particular formula of the manufacturer. It is used mainly in the preparation of dishes of Spanish or South American origin (e.g. Spanish rice, chili con carne, etc.).



Chives: Chives are small, tubular grass-like leaves growing from small bulbs. Chives are a member of the onion family. Their delicate flavor is used to enhance salads, cold soups, and sauces, to which they also add their beautiful bright green color.

Cinnamon: This spice is the dried, thin inner bark of a medium-sized evergreen tree grown mainly in Ceylon, Indonesia, and Vietnam. Cinnamon sticks are formed at the time of harvesting by rolling the moist bark into thin rolls.

Cinnamon can be purchased either whole or in powder form. It is used mainly in baking and desserts and less often in flavoring meat or vegetable dishes.

Cloves: This spice consists of the dried, unopened buds of the clove tree, which grows only on mountains in the tropics. These buds are red when picked and become brown only when dry. It is one of the most pungent spices and has a shape easily identified in mixtures of whole spices – something like a short nail. Cloves are used in many culinary preparations, in roasting pork and ham, in baking, and in pickling meats and vegetables.

Coriander: Coriander is a small seed, light brown in color and somewhat resembling whole white pepper. It is used in candies, pickles, baked goods, meat products, curry dishes, and often in frankfurters.

Cumin: Cumin originated in Egypt and is grown in several tropical countries. It is the dry, aromatic seed of a plant similar to the caraway plant. The spice has a slightly bitter flavor and is used quite freely in Italian and South American cooking.

Curry powder: This blended spice originated in India many years ago but became popular in the United States at about the beginning of this century. It consists of 12 or more spices blended to create the characteristic curry flavor often associated with the exotic Far East.

Curry powder can vary from very hot to very mild, according to the proportions used in the blending of its components. Curried dishes include meat, fish, chicken, and eggs. As a seasoning, small amounts can be added to soups and vegetables for a slight touch of its delicate flavoring.

Dill Seed

Dill: Related to parsley, this herb can be used fresh or dried, or the seeds can be used. It is grown throughout Europe and the United States. Although known chiefly for its contribution of flavor to dill pickles, it can also be used in a variety of other dishes: potato salad, marinated cucumbers, green beans, cauliflower, and some chicken, fish, and lamb dishes.

Garlic

Garlic: Garlic is of European origin; it has been enjoyed for centuries in Mediterranean countries. The popularity of garlic in the United States surged after World War II, due probably to the opening of many Italian restaurants in the large eastern cities and the return of the soldiers looking for the special dishes they enjoyed abroad.

Garlic comes in many forms: fresh, dehydrated, minced, powdered, and in liquid solutions.

Garlic salt is ordinary salt into which finely dried garlic powder has been incorporated. It is used in place of regular salt in preparations where a very light touch of garlic flavor is desirable.

Ginger

Ginger: This may possibly be the oldest spice known. It is the dried root of a subtropical plant grown in China and India and also on the island of Jamaica. It is found on the market either whole or ground. Its major use in this country is in cakes and cookies, pies, fruits, puddings, and some meat preparations.

Mace

Mace: This spice is the lacy covering of the nutmeg shell, lying between the nutmeg kernel and its outer hull. Powdered, it is used as the traditional spice for pound cake and sweet doughs. Mace is not much used in cooking, although its sweet, spicy flavor goes well in many other dishes.

Marjoram

Marjoram: Marjoram is an herb of the mint family. Grown in many countries, the dried leaves and flower stalks are used to flavor soups, stews, and sausages; it is particularly well suited for lamb dishes.

Mint: Mint is an herb that came originally from the Mediterranean area. There are many varieties, spearmint and peppermint being the best known. Mint is appreciated for its cool, refreshing flavor. Wellsuited for lamb dishes, it is also used in fruit salads, iced tea and fruit drinks.

Mustard: White and yellow mustard seeds are relatively mild in flavor; the dark brown seeds are extremely pungent – these are the type used in Chinese cooking. Mustard can be purchased in three forms: whole, ground or powdered, and so-called prepared mustard, which is a combination of ground mustard, other spices, and vinegar. Prepared mustards vary from quite mild to very sharp.

Mustard in its ground form needs to be blended with water to release its flavor. The flavor becomes fully developed after being in the liquid for about 10 minutes.

Nutmeg

Nutmeg: This spice is the kernel of the nutmeg fruit, produced by a tree reaching a height of about 40 feet. Its smooth, warm, spicy flavor can be used to enhance such preparations as cream soups, baked goods, puddings, potato dishes, sauces, gravies, and stews.

Oregano

Oregano: The rise in the use of dried oregano leaves in the United States paralleled the rise in popularity of the Italian pizza pie. It is certainly one of the most popular of the herbs today. The flavor of oregano is somewhat similar to that of marjoram, but stronger. Oregano is grown mainly in the Mediterranean region, chiefly in Greece and Italy. It is used in the United States in the seasoning of tomato preparations, in Italian and Mexican dishes, cheese preparations, and of course, pizza pies.

Paprika

Paprika: This is another of the blended spices, obtained by grinding and mixing together the dry pods of various sweet red peppers after the seeds and stems have been removed. There are two kinds of paprika used in commercial kitchens: Spanish and Hungarian.

Spanish paprika is mild in flavor and a rather bright red. Hungarian paprika is stronger in taste and of a darker color.

Paprika is used in dishes such as Hungarian goulash, chicken or veal paprika, and as an ingredient in the preparation of french dressing and Newburg sauce.

Parsley

Parsley: Parsley is a delicate herb used to flavor or garnish many cold and hot culinary preparations. It is widely grown throughout the world and is widely used in soups, stews, stuffings, salads, sauces, and with potatoes. Parsley is said to be a breath freshener if a small amount is chewed raw.

Pepper (black and white): This is the most common of all spices. It is a native of the tropical regions. There are two kinds of pepper, black and white, and both are produced by the same climbing vine.

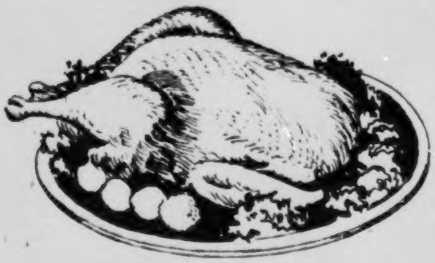
Black pepper is made from the immature berries of the plant. The berries are harvested when still slightly green, left to dry in the sun, and either sold whole as peppercorns or ground. Black pepper is quite pungent in flavor and harder to digest than white pepper.

White pepper is made from the mature berries of the plant after the outer covering, which contains most of the hotness, has been removed. It is also sold in both forms: whole or ground. Due to the complexity of its production, white pepper is more expensive than black pepper.

White pepper only should be used in light-colored food preparations; black pepper may be used in the darker ones. (Black pepper in a cream sauce, for example, would make it unappealing by the presence of the tiny black specks.)

Pickling spice: This is a blend of as many as 10 or 12 different whole spices used mainly for pickling. When used for soups, stews, corned beef, pot roast, etc., the pickling spices are usually kept in a small bag made of cheesecloth, which is discarded after cooking.

Poppy seeds: These tiny blue seeds come from a special type of poppy grown in various parts of the world, but chiefly in Holland. They are used almost exclusively as a garnish for bread and rolls and as a pastry filling. They may, however, be used as topping for cookies and in butter sauces for various foods.



Poultry seasoning: This is another blended spice, and is used mainly for bread stuffings. A light touch of poultry seasoning adds a delicate and unusual flavor to some soups, gravies, and stews.

Rosemary: Rosemary is the needle-like leaf of a shrubby plant of the mint family. Rosemary is used in Europe in the fabrication of soaps, toilet water, and cosmetics for its sweet fragrance. In cooking it goes very well in any lamb preparation and is also good in soups and gravies. Rosemary should always be used sparingly; along with sage, it is the strongest herb.

Saffron: Saffron is the world's most costly spice, but a "little will go a long way." Saffron is grown in the Mediterranean region, especially in Spain. The spice consists of the dried stigmas (the parts of flowers that receive pollen from other flowers) of a flower similar to our crocus. Saffron is used for its rich, pleasant flavor and also for the deep yellow color it imparts to such preparations as rice and sauces. Saffron powder should be steeped in a liquid before being added to any food preparation.

Sage: Sage is a strong spice of minty flavor; only the gray-green leaves are used. The best sage comes from Yugoslavia. Sage can be purchased either in leaf form or powdered. Many cooks consider it the perfect seasoning for poultry stuffing. It is also well suited for sausage, bean, and tomato preparation.

Savory. Savory consists of the dry leaves of a plant of the mint family grown in France and Spain. Its delicate flavor is similar in some respects to the flavor of thyme. Used in the flavoring of many food preparations, it is mostly appreciated in green or dry bean dishes. For this reason savory is often called the bean herb.

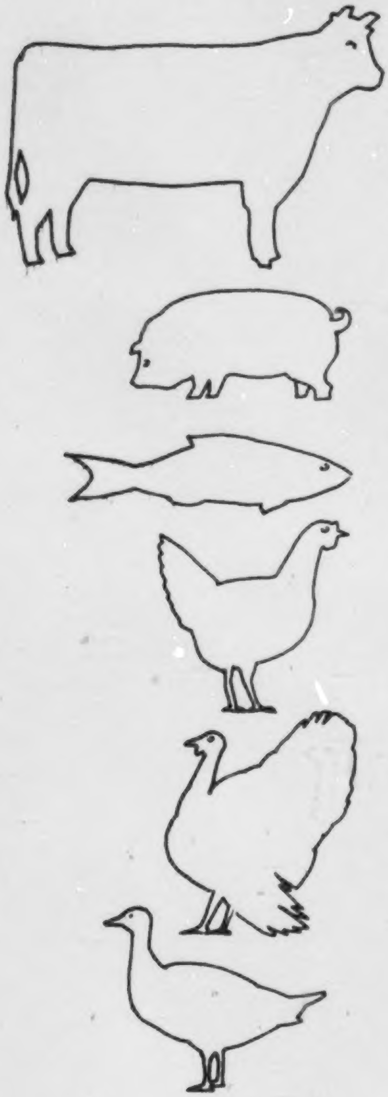
Sesame seed: Immortalized by the "sesame-seed bun" in hamburger commercials, this small, beige-colored seed has been growing in popularity as a nutty-flavored garnish to other foods as well as breads. It has a distinct toasted-almond flavor and a high oil content. The sesame plant, although native to tropical and semitropical countries, is now widely grown in many countries, including our own. The confection called halvah consists of crushed sesame seeds in honey or other syrup.

Tarragon: Tarragon is of Siberian origin but is cultivated today in many countries. Tarragon is not one of the most used spices in the U.S., but is one of the most popular herbs in France. It is used mostly to flavor vinegar in this country. Tarragon leaves, fresh or pickled, are used for decoration in the making of food display pieces. Tarragon is good in seafood dishes, salads, and salad dressings. If you try it in tomato salad, for example, you'll never eat a tomato salad without it any more!

Thyme: Thyme, like many other spices, belongs to the mint family. It is available in whole or ground form and is good in beef stew, clam chowder, meat loaf, chicken dishes, and vegetable preparations. The plant is grown principally in southern France and Spain.

Turmeric: Turmeric is the root of a plant of the ginger family. Turmeric is often used in place of saffron for its similar yellow color and its lower cost. The taste of turmeric is comparable to mustard but is considerably more mellow. Turmeric is an important component of curry powder and is sometimes used in preparing mustards. It is grown in India, China, and other subtropical areas, and on the island of Jamaica.

MEAT



Most meat is the muscular flesh of edible animals. The term "meat" also includes organs, however – liver, heart, sweetbreads (thymus gland), etc.

All edible (muscle) meat is made up of muscles composed of bundles of lean fibers held together and surrounded by connective tissue. This connective tissue contains fat cells, blood vessels, and nerves.

The tenderness of meat depends upon how much of this tissue is present and how much fat it contains. The location of the muscle in the animal's carcass is an important factor. Muscles from the neck, leg, and shoulder are less tender than in the rib and loin areas, because they have been exercised so much more and the connective tissue is denser.

The most commonly eaten meats come from cattle (beef and veal), hogs (pork), sheep (lamb and mutton), fish, and such poultry as chickens, turkeys, and ducks.

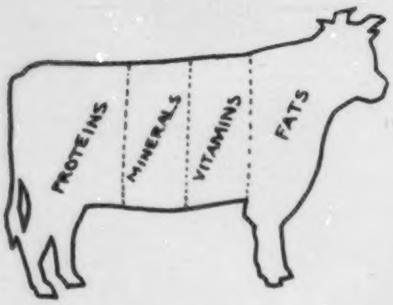
Americans eat about 40 billion pounds of red meat each year, an average of about 194 pounds per person per year.

The 194 lbs. of red meat consumed per person per year (as an average, in 1977) include:

Beef:	127 lbs.
Pork:	62 lbs.
Veal:	4 lbs.
Lamb:	2 lbs.

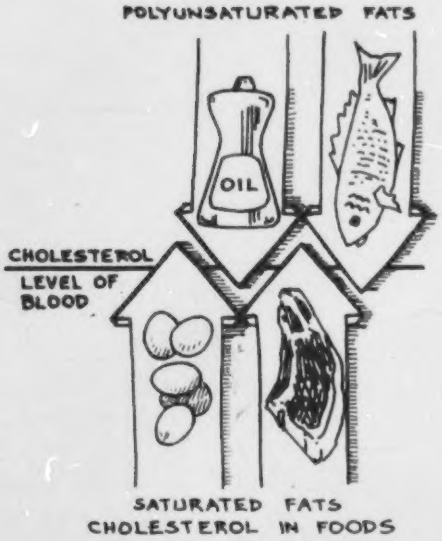
People of some of the main meat-producing countries in the world eat more red meat than Americans do: Uruguayans average about 235 lbs. per year per person, New Zealanders 234, Australians 210, and Argentineans 198.

Nutritional Aspects



Meat contains most of the basic food elements that human beings need: proteins, minerals, vitamins, and fat. Meat contains no carbohydrates, but these are easily obtained from many other foods.

Meats, like milk and eggs, contain *complete* proteins, different from the proteins in vegetables. They contain the minerals iron and copper, which are needed for the blood. Meat is also an excellent source of the B-vitamins. The fat in meat is one of the best sources of body heat and energy.



All meat fats contain cholesterol, a fatty substance present in foods of animal origin. Although cholesterol is essential to the human body for good health, after the age of 6 months the body can make all it needs from other substances.

In the section on oils we spoke of saturated, unsaturated, and polyunsaturated fats (page 96). We saw that saturated fats tend to raise the cholesterol level of the blood. In many people this leads to clogged blood vessels, vascular disease, and possibly heart attacks. Polyunsaturated fats, on the other hand, tend to reduce the amount of cholesterol in the blood.

The American Heart Association recommends that:

(1) We reduce our consumption of fats in general.

(2) Our intake of polyunsaturated fats should be *at least equal* to our intake of saturated fats.

(3) We limit our consumption of cholesterol itself to 300 milligrams a day.

Unfortunately, the fat in red meats is about half saturated. The table below compares the various meats according to the saturation of their fat and their cholesterol content.

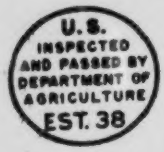
	Fat Type		
	% Saturated	% Polyunsaturated	Cholesterol content per 100g* of cooked meat
Beef	48%	2%	94mg
Veal	48%	2%	101mg
Pork	36%	9%	89mg
Lamb	56%	3%	98mg
Chicken	32%	20%	87mg
Turkey	30%	21%	93mg
Fish	20–25%	35–80%	70mg

***100 grams is about 3½ ounces.**

Assuming that the American Heart Association is correct in its conclusions, it can be seen from the table that Americans should reduce the amount of red meat they eat and increase the proportion of poultry and fish.

Many restaurants have added more fish and poultry to their menus for those who are attempting to follow these recommendations.

Meat Inspection and Grading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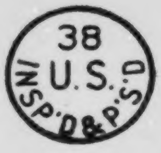
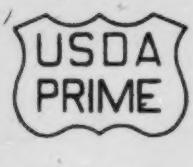
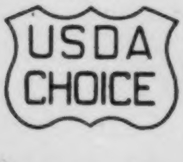


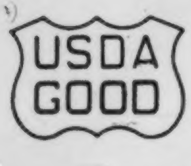
Meat inspection is compulsory. It may be done by Federal government inspectors if the meat is to be sold outside the state where it is produced, or by the city or state if the meat is to be used locally.

Meat inspection is to make sure the meat is *wholesome* – that is, not spoiled, diseased, damaged, or contaminated by some foreign substance. Packaged meat products as well as wholesale cuts of meat are inspected.

The purple vegetable dye used in the inspection stamp is harmless and does not have to be removed before cooking.







Meat grading is not compulsory. If a meatpacker wishes, the Federal government will grade the meat. For beef, for example, there are eight U.S. quality grades from Prime to Canner.

Meatpackers may do their own grading, according to their own systems, but the only products that may carry the official USDA shields are those that have been officially graded according to the Federal standards. These standards define exactly what each grade means.

The grading stamp on meat indicates its quality. The grading is based on three factors: finish, conformation, and quality

Finish refers to the amount, color, and location of the fat inside and outside the carcass.

Conformation refers to the general build, shape, and amount of meat on the various parts of the carcass.

Quality refers to the color and texture of meat, fat, and bones, and the amount of fat and degree of marbling (the presence of fat intermingled with lean muscle tissue).

YIELD GRADE STAMP

Yield grades: Buyers of beef in carcass form – sides or quarters – can be helped by still another type of grading called yield grades. People who buy beef in this form to stock their home freezers should be aware of these grades.

The amount of actual meat that a given carcass will give depends upon the thickness and plumpness of the individual muscles, and even more upon the amount of fat that has been trimmed off it.

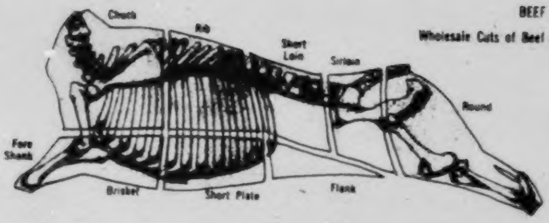
The Federal Government has established yield grades as follows:

Expected Yield of Cuts From Typical Carcasses

Yield grade	Percentage of carcass weight
1	82.0 or more
2	77.4
3	72.8
4	68.2
5	63.6 or less

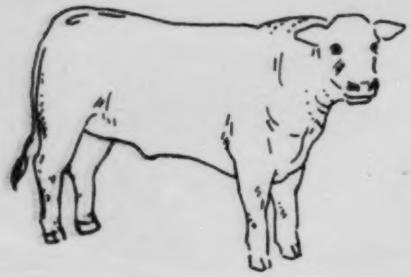
To get the actual yield of a carcass, multiply its weight by the percent given in the table.

Beef



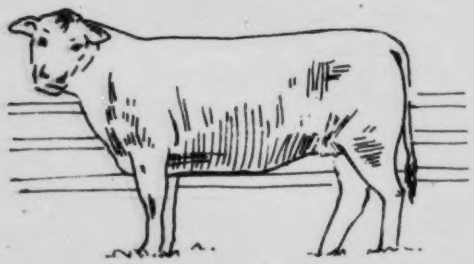
BEEF CHART
Wholesale Cuts of Beef and Their Bone Structure

Beef is the flesh of steers, heifers, cows, bulls, and stags.



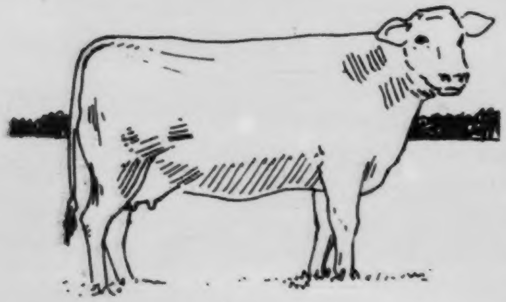
STEER

Steers: A steer is a young male beef that has been castrated when still a calf. Most steers are marketed when they are 2½ to 3 years old. Steers weigh at this time anywhere between 650 and 1250 lbs. and produce sides ranging from 200 to 400 pounds. Steers are usually grain-fed, or at least grain-finished, rather than grass-fed, for superior meat qualities. Most steer meat is graded Prime or Choice, the two highest Federal quality grades.



HEIFER

Heifers: A heifer is a young female animal that has not borne a calf. For meat quality, heifers are second only to steers. Heifers are marketed at the same age as steers.

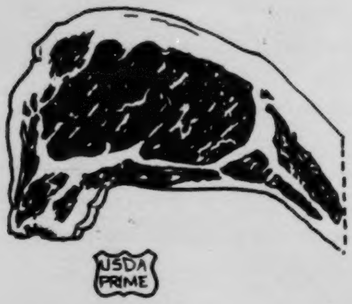


COW

Cows: A cow is a female which has borne one or more calves. Cow meat is far inferior to steer and heifer meat and is usually graded Good, Standard, or Commercial. Cows are marketed for their meat at an older age, since it is usually advantageous to keep them for their production of calves and milk. Age being an important factor in the quality of meat, this is one of the reasons why cow meat is not the best available.

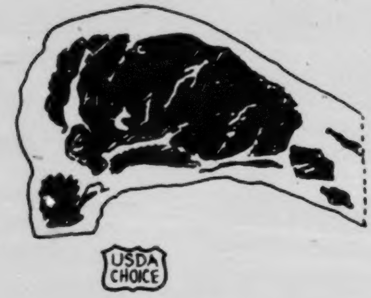
Bulls: A bull is a male, sexually mature and uncastrated. Bull meat is of a darker red and leaner than Prime and Choice meats; the lack of enough fat among the meat fibers is the reason for its toughness. Bull meat is always given a low grade and is used only in making sausages, dried beef, and other manufactured products.

Stags: A stag is a male animal that, for one reason or another, was castrated after it had started to mature. The meat varies from quite tender to very tough.

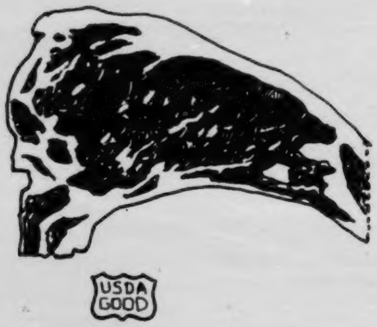


There are eight Federal beef grades. They are, in order of desirability:

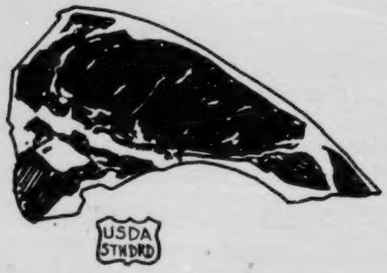
Prime Best available beef with a high fat content. Only 4% of all beef is graded Prime. It is used primarily in expensive eating places.



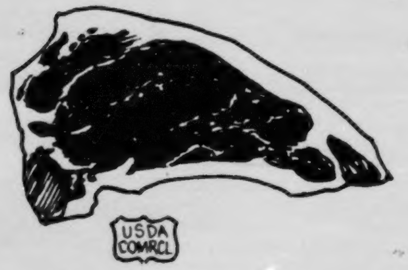
Choice: This grade is the most popular. Beef of this quality represents a great portion of production in the United States. Marbling is present in the meat, and the content of fat is smaller than in Prime meat, reducing the waste in trimming.



Good: Meat graded Good is produced by grass-fed cattle. The meat shows only a light marbling, and the fat is softer and of yellow color. Meat is not as tender as Choice and Prime, but its reasonable cost makes it a good selection for moderate-price menus.



Standard: A grade for meats between Good and Commercial. This quality is usually reserved for the manufacture of food items made of ground meats.



Commercial: This grade usually applies to the meat of older cows. The meat is tough and requires lengthy cooking.

Utility: This grade is for the meat of bulls, stags, (animals castrated after maturity), and older cows. The meat is tough and the fat yellow. This grade is not found in retail stores and is never used in commercial kitchen. It is used in canned meat products and dried beef.

Cutter and Canner: These two grades apply to meats of the lowest quality. The meat is soft but tough and is used mostly in the production of canned foods of inferior quality.

Packing Process

Meat goes through more than 25 operations before it hangs, dressed, in the packinghouse coolers. Each worker is specialized in a single operation and works at an unbelievable speed.

A large packing house works on the assembly-line method and can process cattle at the fantastic rate of up to 150 heads an hour. The process slaughters and converts live cattle to ready-to-ship meat.

The animal is first made unconscious by the hard blow of a mechanical stunner or an electric shock.

When the animal can no longer feel pain, it is lifted up by a hind leg and suspended from a conveyor rail.

The main artery above the animal heart is then opened, and the blood is drained out.

The head and the hide are then removed, the head by knife, the hide by knife and powerful mechanical pullers.

The carcass is then opened and emptied of its internal organs.

The carcass is then split by sawing along the middle of the backbone with a huge electric saw suspended by chains from the ceiling.

Both sides are transported by the use of the overhead rail to another area, where they are trimmed, washed, and inspected.

The sides are then cooled to a temperature of about 35°F. for a period of about 24 hours.

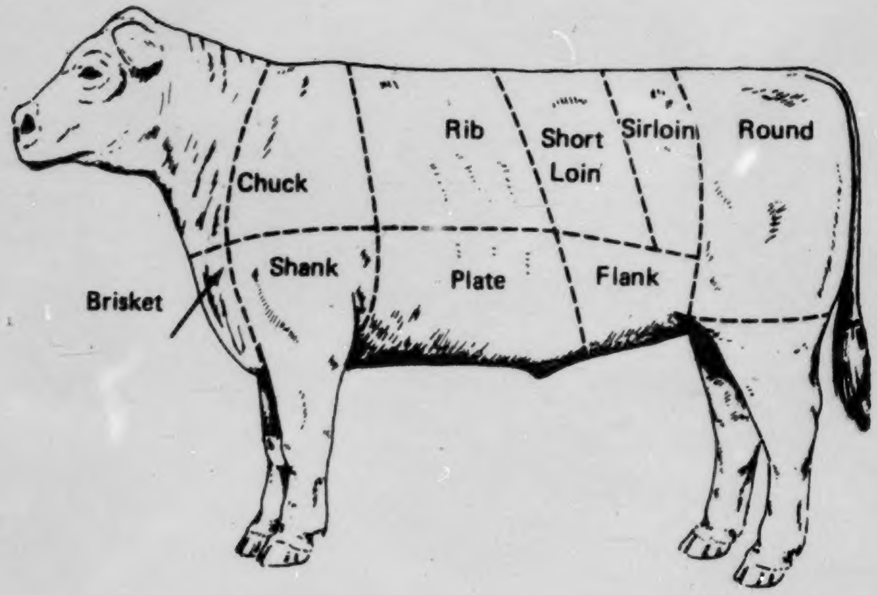
After this they may be cut into wholesale cuts, or only divided into hindquarters and forequarters, or shipped directly as halves.

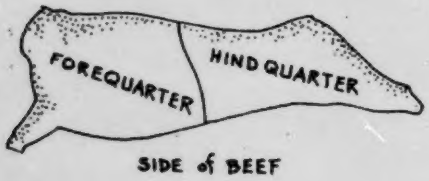
Much beef is sold within 5 to 10 days of slaughter. This is the amount of time required for handling, shipping, local trucking, and processing at the retail store. It is held under refrigeration all this time.

The better grades of beef are usually aged for 10 to 15 days in a chill room at a temperature of about 35° to improve tenderness and taste.

A few cuts (generally loins and ribs) of the highest quality beef may be aged at 32° to 38° F. for from 4 to 6 weeks. Another method is rapid aging – for perhaps 48 hours – at 65° to 68° under ultraviolet rays that retard the growth of bacteria and other microorganisms.

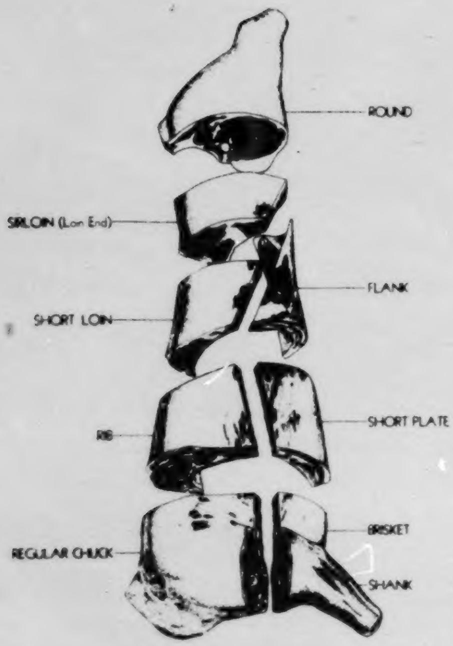
Cuts of Beef



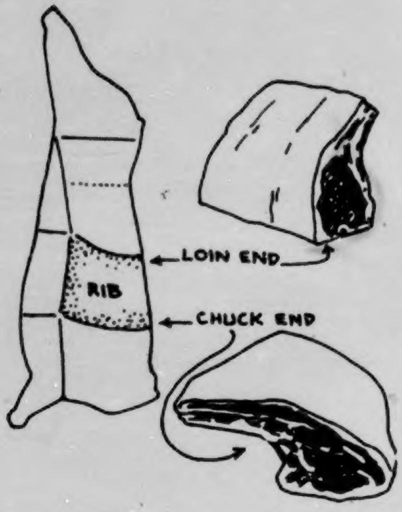


The carcass of beef is divided in two halves called sides.

Each side is divided in two parts, the hindquarter (the back part of the animal) and the forequarter (the part going from the neck to the middle of carcass.)

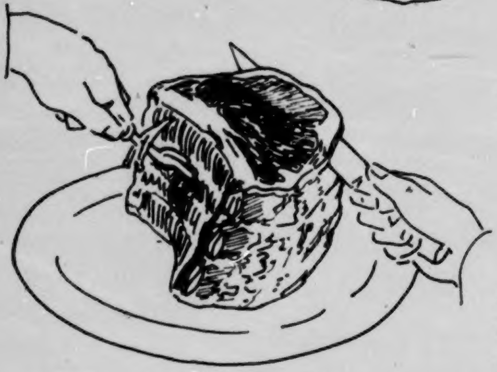


From each quarter, usually four sections are cut out following a more-or-less standard pattern, with generally accepted names for each part. The picture shows the division of the beef side into eight wholesale cuts.



The rib: The rib is the best cut in the forequarter of beef (and the only cut that can be improved by aging). It contains the back 7 of the 13 rib bones found on each side.

The Rib consists of a portion of solid and appetizing meat called the eye, surrounded by bone, fat, and the "tail." The eye of the rib is the continuation of the muscles forming the sirloin.



The average weight of a rib (or standing rib) is 20 to 25 pounds, of which 70 to 80 percent is usable.

The number of salable portions that can be obtained from an average rib depends, of course, on the type of establishment offering it and the price the customer has to pay. The number of portions may vary from 12 to 30 from the same weight rib.

Ribs are cut either by knife by an experienced cook, or with a slicing machine after the rib has been cleaned of its bones.

Ribs of beef are roasted with fat side down first by some cooks, and continuously with fat side up by some others. Each group is convinced that the other cooks "do not know what they are doing".

As a professional chef, the writer admits that both practices have their points . . . but thinks the former is a little bit "righter."

The trimming of a hot, cooked rib of beef is usually done by an experienced cook. The high cost of this cut does not allow any avoidable waste.

Rib of beef is one of the most expensive items offered on the menu of food service establishments. Its handling should be trusted to a proven, conscientious, and experienced cook.

Ribs of beef are ordered by the customer according to personal taste: rare, medium, or well-done.

Rare, medium, and well-done are the only accepted terms in professional kitchens. "Medium-rare," "well-done with a slight pink in the middle," "medium-well," "well-done but not dry," etc. are impossible requests assuming the presence of a kitchen full of magicians, not chefs.

I'LL HAVE IT MEDIUM WELL DONE WITH A SMIDGEN OF PINK NEXT TO THE BONE.
MENU

It is a good policy for any hotel or restaurant using at least three ribs a day to cook one rare, one well-done and one medium-rare.

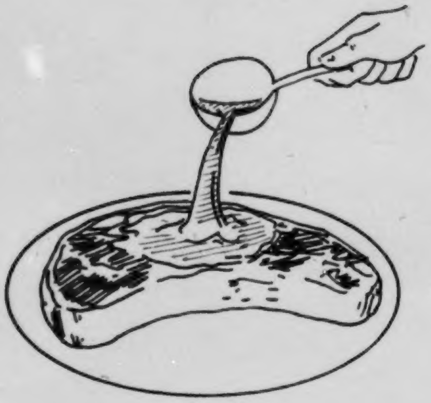
At times a cook will have an order for a well-done piece of rib of beef when the supply is medium or rare.

There are several ways to remedy this situation:

Put the slice of beef on the apron of a lit range for a few seconds on each side.

Immerse the cut in the beef gravy container on the steam table, which is usually kept very hot.

Put the order under the broiler with a leaf of lettuce on top of it to keep the exposed side from getting dry.



A requested rare piece of beef can be obtained from a medium cut (and even from a "medium-well" cut) by covering the piece of meat available with the blood drippings accumulated on the receiving tray of the slicing machine.

Many "old-timer" cooks will impress you by revealing this secret: "A little beet juice on the top of a well-done piece of beef will give it the appearance of the most appetizing rare beef. This is not true! This silly trick is so old that only a blind man could fall for it, and only until he starts eating his serving.

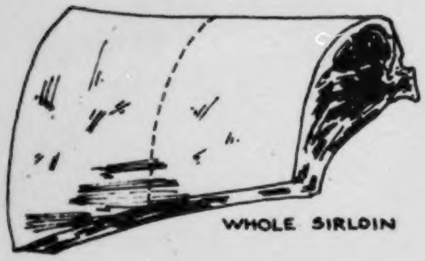
An order for a Rib of Beef is usually served as one single piece.

An order for an "English cut" rib of beef consists of two thinner slices which together weigh the same as an average single-cut regular cut.

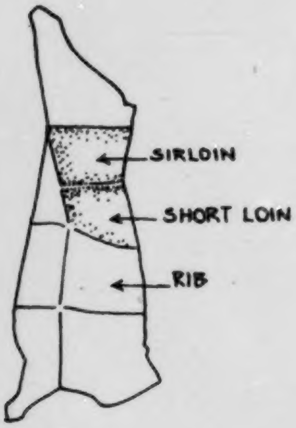
A rib of beef, or a portion of it, is a risky item to reheat and serve to paying customers. If the leftover was cooked rare, it is possible to salvage it for medium or well-done orders at a later date, but a connoisseur (gourmet) will certainly notice the difference.

A well-done leftover rib of beef, or a portion of it, should never be reheated and served as Prime Rib. It should be used either for sandwiches (hot or cold), for stews, or as an ingredient in stuffings.

Occasionally the rib is cut into steaks, which are broiled like other steaks.



Sirloin: Probably the best cut on a side of beef. The whole sirloin comes from a portion of the animal where the muscles are not used much, and the meat is therefore very tender.



Sirloin contains two different qualities of meat: the sirloin itself and the filet or tenderloin. The sirloin is usually cut into two sections in the United States: the sirloin and the short loin. The sirloin is the part from which sirloin steaks are cut. The short loin is the part from which we cut (from the rib end back), the club steaks, T-bone steaks, and porterhouse steaks.

Club steaks contain sirloin and little or no tenderloin.

T-BONE STEAK

T-bone steaks contain both sirloin and tenderloin meat.

PORTERHOUSE STEAK

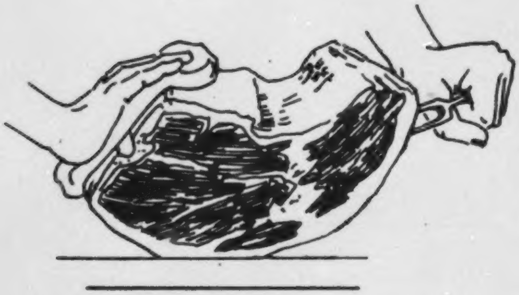
Porterhouse steaks contain sirloin and the largest amount of tenderloin meat. Porterhouse steaks are the best of the steaks cut by the American method.

The sirloin steaks should be cooked by sauteing or broiling, in view of the tenderness of the meat.

The whole sirloin strip is often roasted whole and then sliced to order. Many chefs think it should be roasted fat side down first.

A sirloin strip for steaks or roasting weighs an average of 15 pounds.

The cooking time varies from 1¼ hours to 1¾ hours, according to the weight.



When turning or lifting a roasted sirloin with a kitchen fork, care should be taken not to insert the prongs into the center of the meat. The fork should be used in the thinner edge or "tail", made of fat and sinew.

TENDERLOIN (FILET)

Tenderloin: The tenderloin of beef, originally common as a cut only in Europe, has become more popular in recent years in this country. It is, as we said, the inside, most tender part of the sirloin.

The tenderloin or filet is the most expensive cut of beef, so much so that the average home can hardly afford it except on very special occasions.

Tenderloin meat is usually priced twice as high per pound as the best quality steak.

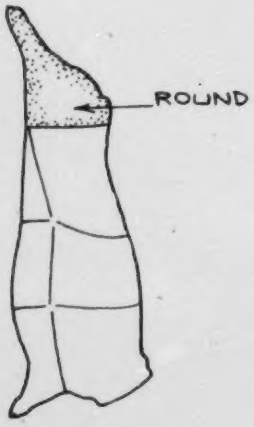
A whole tenderloin weighs around 5 to 7 pounds, trimmed of its fat covering.

Tenderloin can be roasted whole. Some fat is often added in the form of strips inserted with the help of a special needle.

A filet mignon is an individual cut from the tenderloin. Filet mignons are almost always broiled.

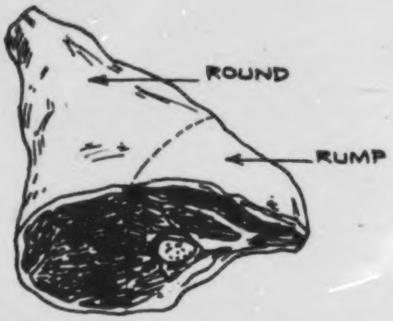
A Chateaubriand is a filet mignon cut into thick slices and serving two people. It is also broiled.

Thinner slices of tenderloin are used in some culinary preparations and are called médaillons.

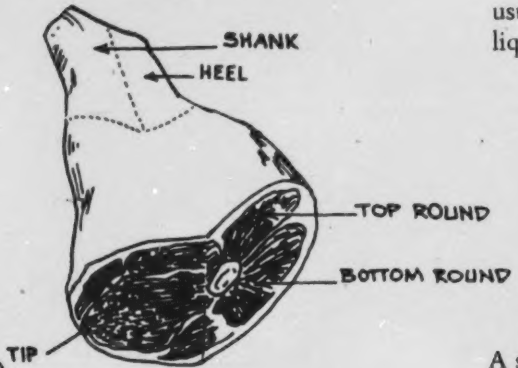


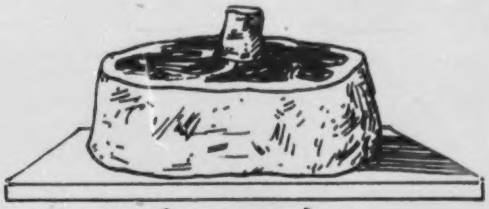
Round and rump: The "hip" and hind leg of the animal.

When the round is boned, it will consist of five cuts: the rump, the top round, the bottom round, the knuckle or tip, and the hind shank.



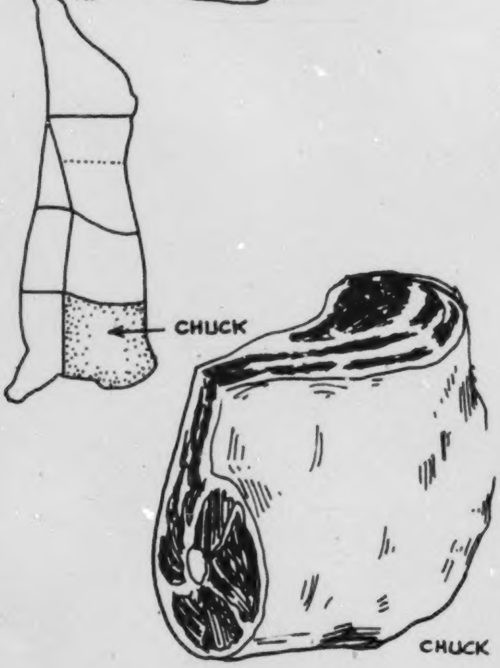
The round is made of different muscles, each of which has been used extensively. For this reason the meat of the round is rather tough, and the cuts are usually cooked by stewing, braising, and boiling in liquids, and sometimes by roasting.





"STEAMSHIP"

A steamship round roast is a large roast made of the round from which the shank and the rump have been removed. It is called a steamship because, after some of its meat has been sliced off, the protruding bone looks a little like a smokestack.

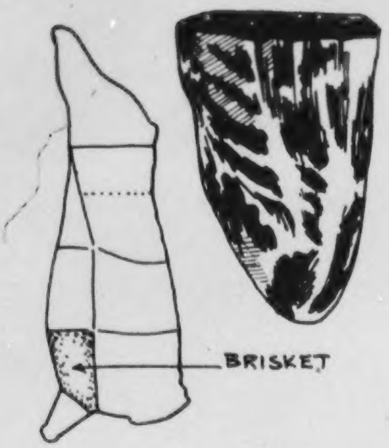


Chuck: This section of the forequarter includes the first 5 rib bones. It is a fairly tough cut of beef, but is comparatively lean and flavorful.

Chuck meat will produce a good quality ground meat. Cut in cubes, chuck is preferred by many chefs for the preparation of stews, goulash, and other similar dishes.

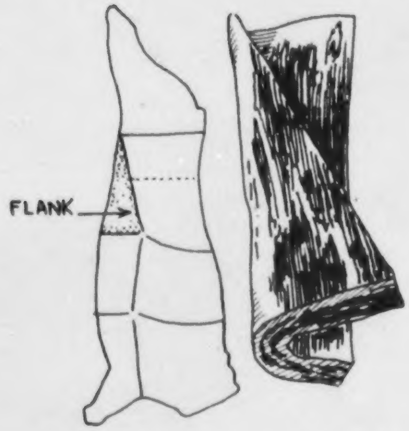
Although not generally used in restaurants, a chuck blade steak or roast is a popular cut for home consumption. The whole steak or roast may be braised, or the center portion broiled and the outer, toughter portions stewed or braised.

CHUCK BLADE STEAK

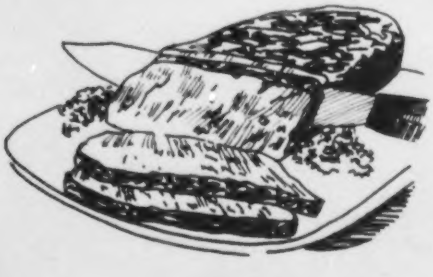


Brisket: The brisket is the relatively thin layer of meat covering the upper part of the animal's breast. The brisket is composed of several layers of muscles running in several drections. Cutting this piece of meat "against the grain" (at right angles to the direction of the meat fibers) is thus impossible in the case of a whole brisket. Brisket is a tough cut of meat but very flavorful. It is always cooked by one of the lengthy cooking methods: braising as pot roast or sauerbraten, made into corned beef and boiled, or simply cooked as boiled beef.

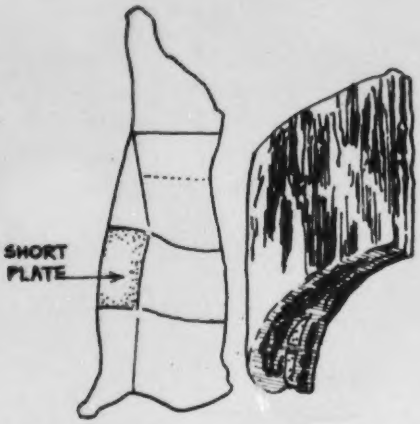
Shank: The shank is the lower leg and contains more bone than meat. It is almost never used in commercial kitchens. The meat from the shank is not only tough but much less tasty than the other cuts. It is relatively cheap and is used mainly for ground beef. A stew made from shank meat will be far inferior in quality to one made with chuck meat.



Flank: The flank cut is part of the fairly thin wall of the abdominal cavity. The meat fibers are long and coarse, making for a rather tough meat. A small part of the flank, weighing about 1½ pounds when cleaned of its fat, is known as flank steak and is fairly appreciated by many. The flank steak is usually scored (criss-cross cuts deep into its surface) before broiling or sauteing.



London Broil is broiled flank steak, well-browned on the outside and nicely rare on the inside. It is cut in very thin, slanted slices, across the grain.



Short plate: The short plate is the section of the breast of the animal opposite the rib cut. The short plate is made of less tender meat, a large amount of fat, and the ends of the rib bones.

Short plate is mostly used as soup meat. The "short ribs" sold from this section are fatter and inferior to the much appreciated short ribs cut from the standing rib section.

Variety is the SPICE of Life

Variety meats: This is one of the names given to many edible parts of the animal which are not part of the carcass. Other names include: lights, meat specialties, and glandular meats.

Variety meats include brains, liver, heart, kidneys, tripe, tongue, oxtail, and sweetbreads (the thymus gland of calves). Perhaps with the exception of liver, these meats are seldom found on the dining table of the average American family. Variety meats like brains and sweetbreads are most appreciated by so-called gourmets and are served only in the better eating places.

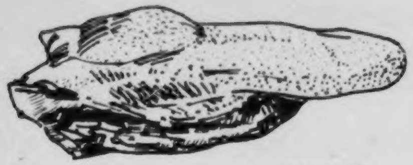
LIVER

Liver and kidney are exceptionally nutritious foods, being very rich in iron, vitamin A, the B-vitamins, and liver even in vitamin C. Some of the other variety meats are also highly nutritious, particularly heart.

Unfortunately, the most nutritious of these meats are also very rich in cholesterol. They are such excellent foods, however, that they should be included in the diet unless otherwise instructed by a physician.

Liver: Beef liver is less tender than calf or other livers, and consequently is much cheaper. It is served in institutions and industrial cafeterias, but practically never in restaurants and hotels. Liver is usually cut in thin slices while partly frozen and cooked by sauteing or broiling. Cut thicker, it can also be braised, usually with onions, and produces an excellent dish, which incidentally is very popular in France.

Liver paste makes an excellent hors d'oeuvre.

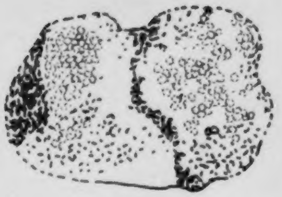


TONGUE

Tongue: Beef tongues are a rather popular variety meat. They are available smoked, fresh, pickled, and corned.

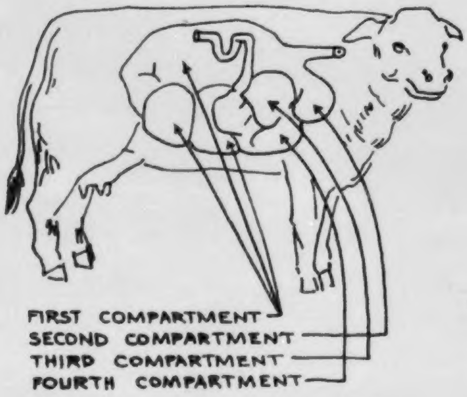
Beef tongues are usually cooked by boiling but can also be braised in the same manner as braised beef.

Beef tongue is eaten hot or cold. It is always one of the meats served on assorted cold meat platters in the better eating places.



TRIPE (HONEYCOMB)

Tripe is the muscular inner lining of the different parts of the beef stomach. Tripe differs in appearance according to the part of the stomach it comes from. The most popular tripe is the honeycomb tripe, from the second of the four stomachs.



Tripe is usually cooked at the packing plant and sold frozen in large blocks.

Tripe bought already cooked nevertheless requires a long additional cooking time to be tender enough. Some French recipes call for 12 to 16 hours' cooking time in a tightly covered special pot placed in a slow oven.

Tripe is not a very popular table food in the United States except in some of the southern states.

Tripe is first boiled in water and then sauteed or stewed with vegetables.

Tripe, cut in very thin strips, is also eaten cold with a vinaigrette dressing.

Philadelphia Pepperpot – a very well known hot soup – includes diced tripe as one of its main ingredients.

Ground beef

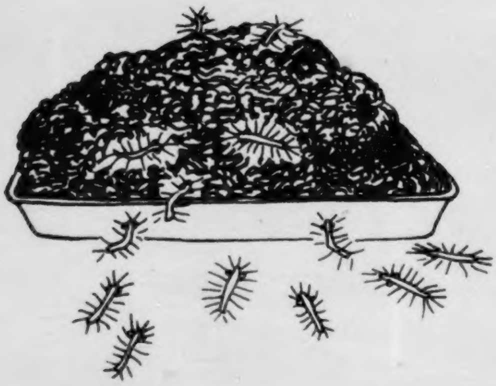
Ground beef is today a staple food in practically every U.S. household.

Recent surveys claim that 40 billion (that is 40,000,000,000) hamburgers are consumed each year in the United States, requiring the use of 10 billion pounds of ground beef.

Ground beef is a reasonably priced food and its versatility provides for a varied and nutritious menu.

By USDA regulations, ground beef cannot contain more than 30% fat. It is usually sold with a fat content of 20 to 25%.

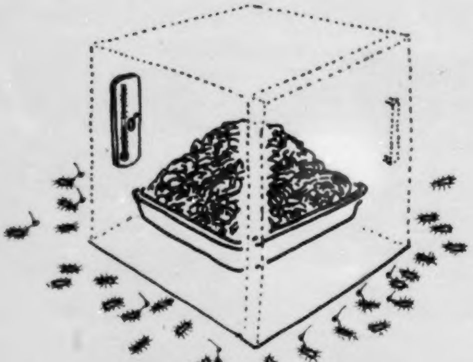
Ground beef without any fat would be dry after cooking and of poor taste.



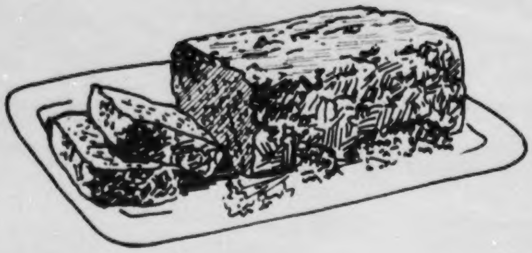
Ground beef is a highly perishable commodity. Bacteria will grow at a faster rate in ground meat than in a solid piece.

Two days is the maximum time hamburger should be stored in a cooler.

If not intended to be used within a day or two, fresh ground beef should be placed in the freezer.



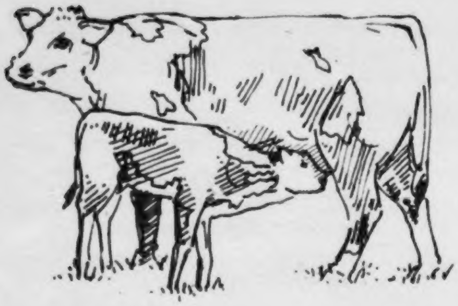
Any beef bought already ground and not frozen should be used the same day; chances are that the meat purchased was ground the day before or even earlier.



Food items are not necessarily fresh because you just bought them!

Ground beef is used in the preparation of many dishes, such as hamburgers, Salisbury steaks, chili con carne, meatballs, meat loaves, cocktail meat balls, lasagne, meat stuffings, and also in a raw specialty called steak Tartare.

Veal



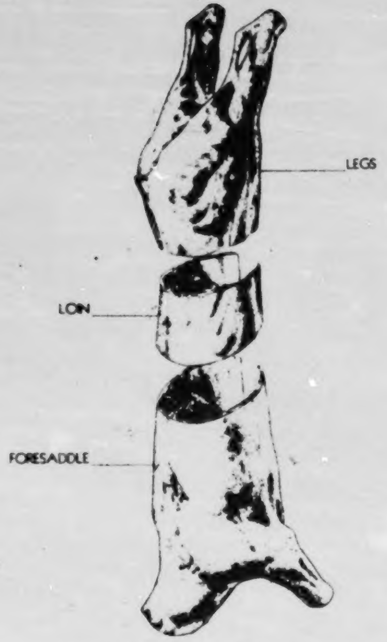
Veal is young beef that has lived largely on milk. Only dairy cows are commonly fattened for veal, because it is more profitable to raise beef cows for beef.

The youngest of all veal – bob veal – is only 1 to 5 days old when slaughtered. The meat of these veals is used in canning, veal patties, and – because it is so tender – it is also used in the preparation of baby foods.

The calves producing the meat for general marketing are slaughtered at about 3 months; at this time they weigh from 100 to 150 lbs.

Over three months of age, the animal is called calf and is slaughtered mainly for its variety meats, the rest being used for patties and canned goods. Calf meat has not yet gained the texture and flavor of beef meat and has already lost the fine qualities of veal meat.

Americans are eating less and less veal every year: 4 pounds per person per year in the latter seventies compared with 12 pounds in the mid-forties.

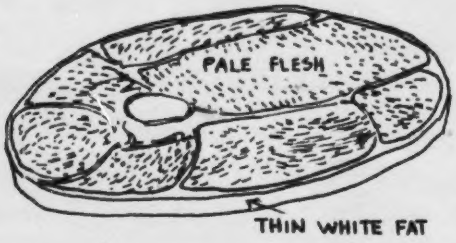


WHOLESALE CUTS OF VEAL

Veal is not produced as much as it used to be for reasons of economy. Raising veal is an expensive operation, for one thing, since they consume milk that could be sold. Also, dairy cows are raised in smaller numbers these days, since modern methods and technology have made each cow more productive of milk.

Veal is inspected and graded by either the State or the United States Department of Agriculture, the same way beef and lamb are.

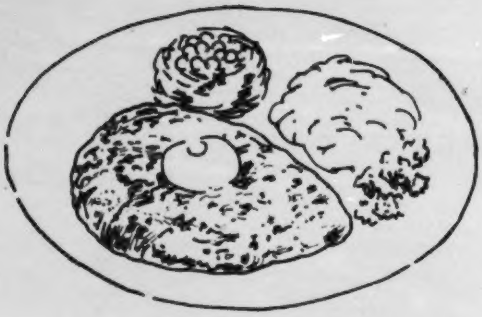
When veal is given a quality grade and stamp by the USDA, the kind of meat is also included. That is, the stamp says "VEAL" or "CALF," as the case may be.



Veal quality can be judged first on the appearance of its thin fat covering, which should be firm and white with no sign of yellowing.

The meat should be a very pale pink, almost greyish-white for a milk-fed veal. A grass-fed veal will furnish a slightly darker meat of inferior quality.

Veal should be firm, fine-grained, moist, and shiny.



BREADED VEAL CUTLET

Veal will spoil faster than beef due to its lack of a thick, protective layer of fat.

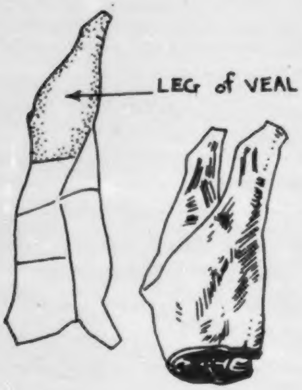
Veal is a relatively expensive meat in comparison with beef.

A cutlet is a individual-size portion of solid meat without any gristle, fat, or bone. The greatest percentage of veal available to the consumer today is in the form of cutlets.

Veal cutlets are very popular in the United States and can be prepared in many ways: breaded, stuffed with different ingredients (e.g., veal Cordon Bleu), rolled (e.g., veal birds), braised, and also pan-fried or sauteed in butter or oil with only salt and pepper as seasoning.

SCALLOPINI of VEAL MARSALA

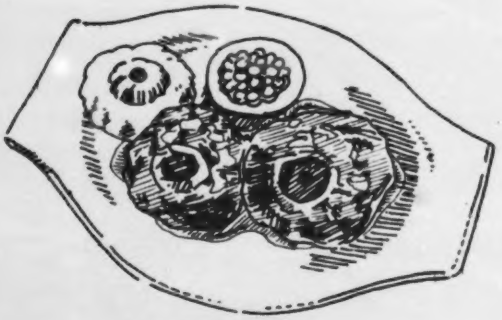
Scallopini are small, rather thin pieces of veal, further thinned by pounding. They are almost always floured and sauteed in butter with the addition of different ingredients, giving each dish its particular name (e.g., Veal Scallopini Marsala, Veal Scallopini Chasseur).



Cutlets and scallopini can be obtained from four of the primal cuts: the rack (rib), the shoulder (chuck), the loin, and the leg.

Commercial kitchens usually buy the whole leg of veal to cut their veal cutlets from. The cutlets from the leg are not so tender as the ones from the loin or rib, but they are more than adequate and of a lower cost, due to shorter labor time required to cut them.

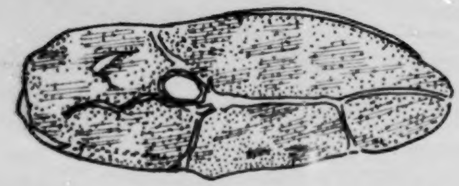
Veal is also used in the form of roasts, chops, and stews. It is also a desirable ingredient, when ground, in the making of meat loaves and meat stuffings.



OSSO BUCCO

Stewing veal: The meat used for stewing usually comes from the shoulder, neck, breast, shank of the leg, or the short ribs.

Osso Bucco is a renowned Italian specialty prepared with veal knuckles.



Veal leg cutlet: The veal leg cutlet, as stated above, tops the list of veal cuts for practical purposes.

Dividing a veal leg into its different usable muscles is usually done by an experienced butcher rather than a cook. Although many cooks can "work" a leg of veal, their slow production – compared to that of an experienced butcher – would make the finished product prohibitive due to the labor-cost factor.

VEAL LOIN CHOPS

Veal loin chops are meaty chops which contain part of the tenderloin and resemble a minature porterhouse steak.

Veal loin chops are usually cut ¾ to 1 inch thick: a single chop provides enough meat for one person.

VEAL RIB CHOPS

Veal rib chops are less meaty than loin chops and vary in quality: the best rib chops come from the center cut of the sirloin near the rib. The quality declines as the cut nears the shoulder.

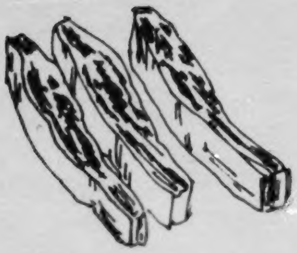
VEAL ARM STEAK

Veal arm steaks are cut from a section of the shoulder near the rack. The cost of arm steaks is relatively low because the meat is rather tough, and there are bone and gristle in the cut.

VEAL BLADE STEAK

Veal blade steaks are among the least costly cuts of veal one can buy. They come from the back part of the shoulder and include a great amount of fat, gristle, and bone.

Veal blade steaks are cheap but not a very good buy.



VEAL RIBLETS

Veal riblets are cut from the breast of veal and are very cheap (and, we should add, not often available). It is the equivalent of short ribs of beef, but of course with very little meat on the ribs.

Veal riblets, barbecued, can be a real treat, but a small mountain of them is needed to statisfy the appetites of a few diners.

SHANK-HALF ROAST

Veal roasts: Veal roasts can be cut in all shapes and sizes, from the leg, loin, rack, shoulder, and breast.

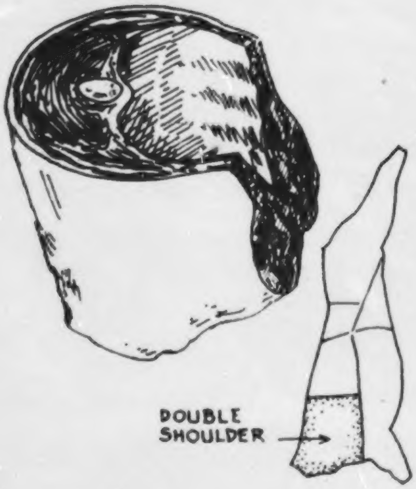
Veal roasts are sold either boned and tied or untied with the bones in.

A good veal roast should include the bone, whose gelatinous substances will give the drippings the rich texture and shine characteristic of veal sauces and gravies.

STANDING RUMP

Shank-half roast is sold with the bone and provides the most meat and thus the least waste. It is also easy to carve. A shank-half roast weighs anywhere between 5 and 7 pounds.

Standing rump roast is sold either with the bone or boned, rolled, and tied. The meat is of very high quality but hard to carve on account of the bones. The ideal way to use a standing rump roast is to have the butcher remove the bones and roll and tie the roast; then cook it with the bones in the pan.



Shoulder of veal is always boned, rolled, and tied into roasts of various sizes. The shoulder is of a lesser quality than the roasts from the leg, but its lower price makes it an excellent buy. The presence of fat, bone, and gristle gives the roast an excellent flavor and keeps the meat moist. (Veal in any form is too often dry.)

LOIN of VEAL

Loin of veal is the most expensive and most desirable cut of the entire veal. As in the case of beef, the loin muscles of the animal are used less than the other muscles, thus providing a more tender meat.

Loin of veal is so expensive that it is usually sold in the form of chops. A whole loin, weighing 4 to 5 lbs., would cost too much for the average family.

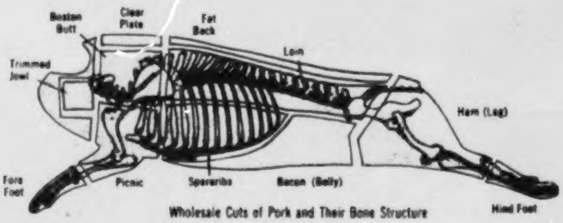
BREAST of VEAL

Breast of veal is a low-cost veal roast. It is extremely bony and contains little meat. It is not, therefore, a very good buy for quantity of meat. It is often used as Stuffed Breast of Veal, where a pocket cut into the breast is filled with a stuffing, providing a delicious dish at a moderate cost.

VEAL RIB ROAST

Rib roast of veal would be the best cut of veal for roasting if the ratio of meat to bones were higher. The meat is succulent, but a 5-pound rib roast provides hardly enough of it for 3 or 4 people.

Pork



Wholesale Cuts of Pork and Their Bone Structure

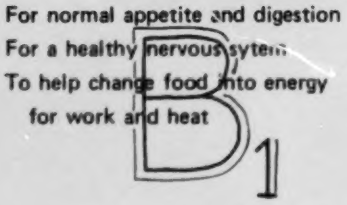
Pork is the flesh of hogs. Since most pork comes from young animals ranging from 5 to 8 months of age, this meat, like veal and lamb, is very tender.

In the United States practically all pork is divided into cuts in the packing plant.

Only about 30% of pork meat is sold fresh. The rest is cured by various methods, rendered into lard, or made into sausage.

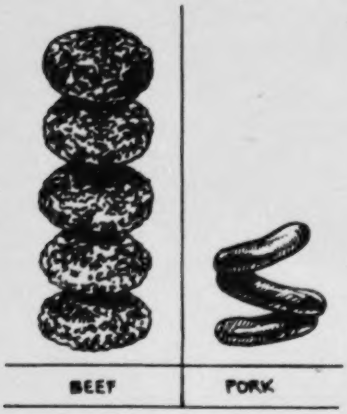
Unlike the beef carcass, which is divided according certain standards, pork is sold by cuts according to the actual needs of the customer. (See illustration, page 142.)

Practically every pork cut can be cured, and, again, the amount of curing is decided by the market trend.


For normal appetite and digestion
For a healthy nervous sytem
To help change food into energy
for work and heat
B_1

In addition to providing high-quality protein, iron, and B-vitamins, in common with other meats, pork is the richest known food source of thiamin (vitamin B_1), a vitamin necessary to many important body functions.

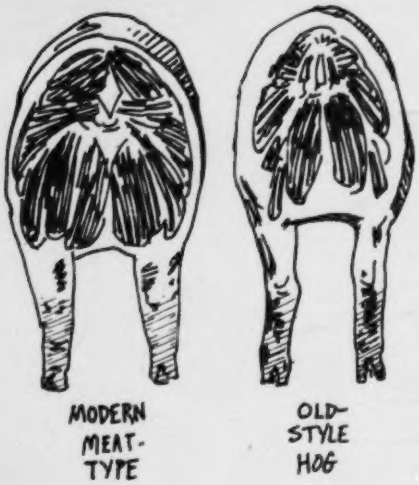
The lean part of fresh pork (with fat trimmed away) is not much higher in fat (and calories) than the lean meat of the average beef. Pork is generally lower in price than beef.



Consumption

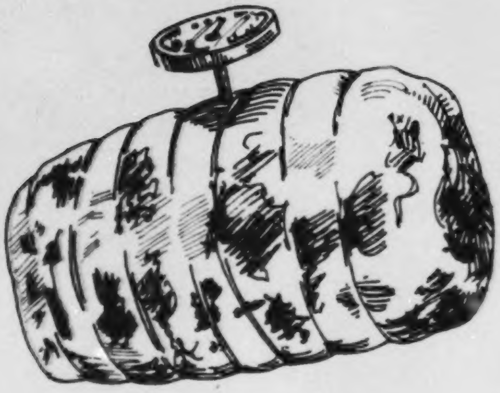
The consumption of pork has not increased since the beginning of this century. Americans eat less than half as much pork as beef.

Pork is inspected and graded by the U.S. Department of Agriculture, but not in the same manner as beef. Grades of pork include only three classifications: U.S. No. 1, U.S. No. 2, and U.S. No. 3. These grades are actually yield grades similar to the yield grades described for beef (page 118).



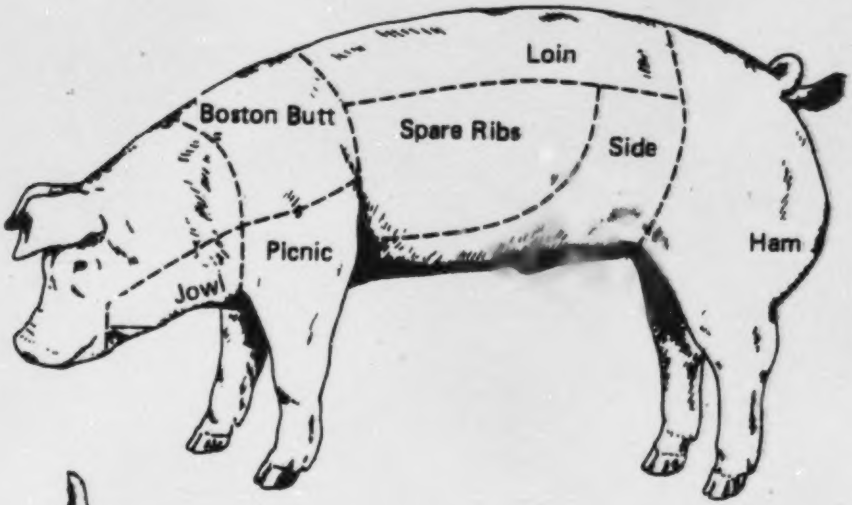
There is less difference in tenderness, juiciness, and flavor in pork as compared with beef. The factors to be considered when selecting pork are to get cuts with little fat and with full, plump muscles.

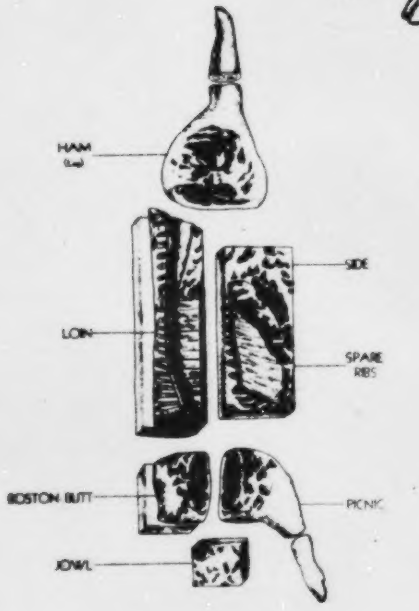
In high quality fresh pork, the lean will be firm, grayish pink or darker in color, and it should have some marbling of fat. Soft, pale, watery lean is definitely less desirable.



Pork meat should always be cooked long enough to bring its inside temperature to 170°F. This provides a safety margin over the temperature needed to kill a certain parasite called trichina which is sometimes present in pork. Trichina can cause a serious disease in humans, called trichinosis.

Fresh pork is usually received by retailer or wholesalers already divided into primal cuts.

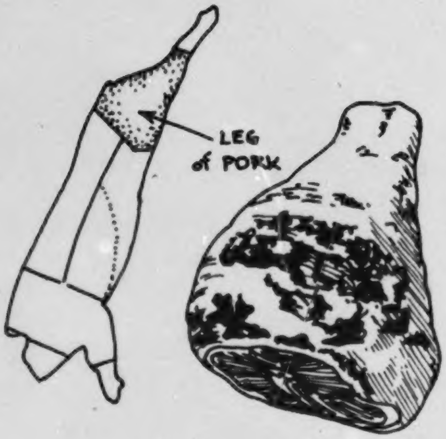




WHOLESALE CUTS
OF PORK

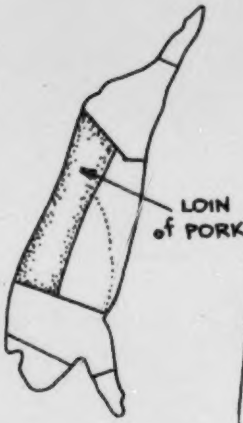
There are seven primal cuts of pork:

1. Leg
2. Loin
3. Belly (side)
4. Breast (spare ribs)
5. Shoulder (Butt and Picnic)
6. Jowl
7. Feet



Leg of pork is usually referred to as fresh ham. It represents 18% of the hog's weight and yields the greatest amount of solid, lean meat for roasts and steaks.

The leg itself is usually divided into two roasts: a 6- to 8-pound fresh ham butt end and a 6- to 8-pound fresh ham shank end.

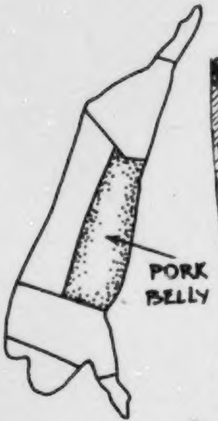


Loin of pork extends along the backbone from about the third rib back to the hip bone.

A loin of pork weighs from 10 to 14 lbs. and represents 15 percent of the animal.

Loin of pork may be purchased whole or divided into roasts and chops.

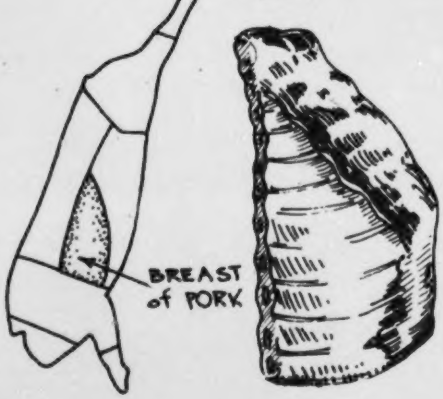
The cuts from the hip end of the loin contain a great deal of bone, and the cuts from the shoulder end contain much fat as well as bone. These cuts cost less than the center cut, which corresponds roughly to the rib and short loin sections of the beef.



Pork belly: Pork belly represents almost 18 percent of the animal.

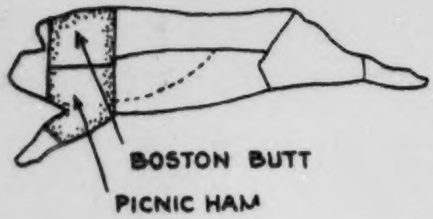
Most of the pork belly meat is turned by the processors into salt pork and bacon.

The best bellies are a uniform 1 to 1½ inches thick and have distinct streaks of lean running within the fat.



Breast of pork is the primal cut that gives us spare ribs. It is only 3 percent of the entire animal.

The butcher usually cuts and trims the ribs for the consumer from a whole rib section that weighs anywhere from 2 to 5 pounds and contains up to 13 ribs. These whole-rib sections are called slabs of spareribs.



The weight of a slab of spareribs is important. A 2-pound slab has the most tender meat, but it is expensive and hard to get. A 3-pound slab will give the best ratio of meat to bone; the meat is reasonably tender, and the bones still small enough. Over 3 pounds, a slab will give more fat, tougher meat, and a larger proportion of bone.

WHOLE PORK SHOULDER

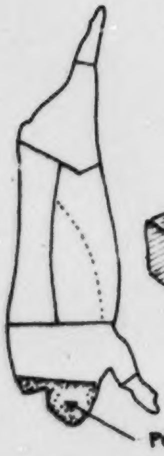
Pork shoulder: The pork shoulder weighs from 12 to 16 pounds and represents 15 percent of the animal.

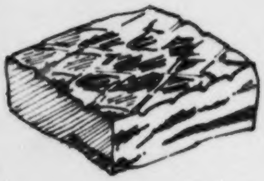
Visually, the shoulder presents an appearance similar to the fresh ham (leg of pork), but the meat it yields is not as tender and lean.

The pork shoulder is sometimes sold whole, in which case it is better if boned, because the complicated interior bone structure makes for tricky carving.

The shoulder can also be divided into fresh butt (Boston butt), and fresh picnic ham. The latter can in turn be divided into picnic butt, hocks, and arm steaks.

The shoulder meat is well suited for grinding in the preparation of certain stuffings.

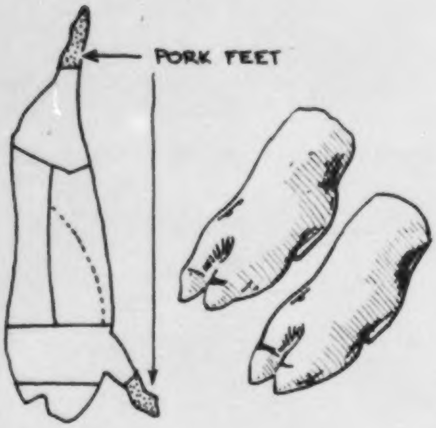




Pork jowl: Pork jowl is very seldom found fresh in the butcher shops.

Pork jowls, by and large, are used by the processors mainly to make what is called jowl bacon.

In the southern United States, old ethnic recipes often call for the use of pork jowl.

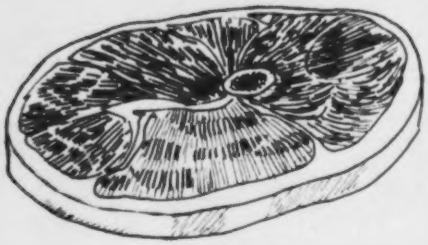


Fresh pork feet: Fresh pork feet may be purchased whole or cut into knuckles and hocks.

In retail stores fresh pork feet are often sold split along their length.

Many cooks in the past used pork feet to flavor soups, sauces, and gravies. The feet also contributed a natural thickening, due to the great amount of gelatin they contain.

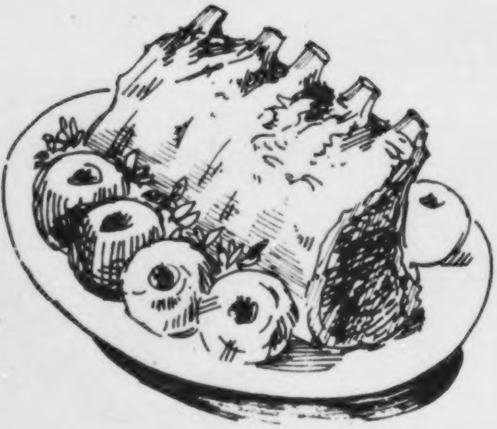
Many of the pork feet are used by processors for pickling.



HAM STEAK

From the seven primary cuts of pork many subdivisions are obtained, most of them bearing familiar names. (Who never heard of ham steaks? But how many can say clearly where they come from?)

Pork roasts



RIB ROAST

A pork roast can be the basis of a relatively inexpensive and delicious meal.

Pork roasts are easier to cook than other roasts (beef and lamb especially), for the simple reason that they must always be cooked well done.

The presence of fat also provides for built-in self-basting, almost a guaranteeing a moist finished product.

CENTER-CUT LOIN ROAST

In order of desirability, pork roasts can be listed as follows:

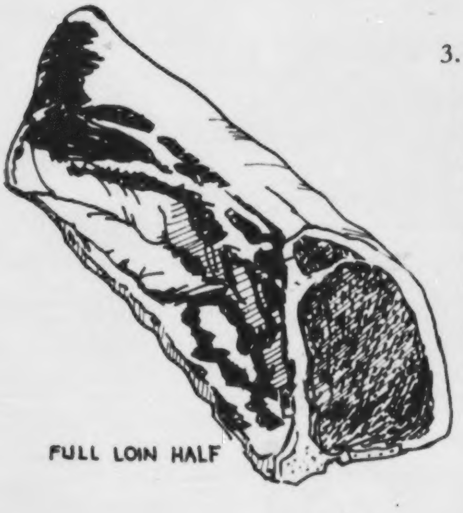
1. The center-cut loin is the best pork roast available. It weighs about 4 pounds and, since it contains the tenderloin (filet), it is meaty from end to end.

   The center-cut loin roast is somewhat hard to carve, due to the bones present. It is a good idea to have the chine bone (the part of the backbone protruding outside the roast) removed by the use of a sharp meat cleaver or an electric meat saw.

CENTER-CUT RIB ROAST

2. **Center-cut rib roast** also weighs about 4 pounds but does not include any of the filet; the ratio of meat to bone is thus less favorable. The cost of a center-cut rib roast is slightly lower than that of a center-cut loin roast.

   The rib roast is a little fattier than the loin roast. It can be carved more easily into uniform chops after roasting.

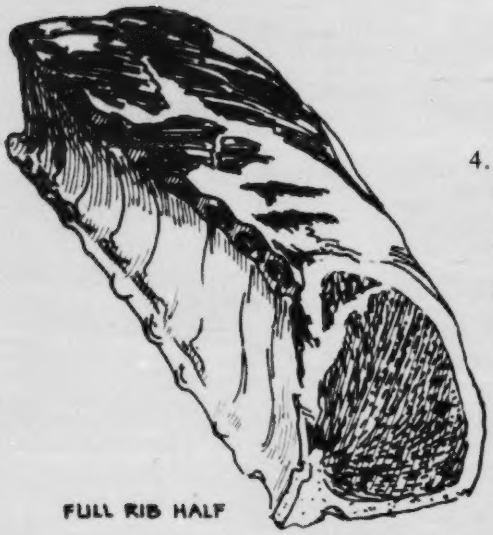


FULL LOIN HALF

3. **Full loin half:** The full loin half weighs from 2 to 3 pounds more than the center-cut loin of pork but is usually sold for less per pound, since this cut includes the bony loin end close to the hip.

   The full loin half provides tender meat, making for excellent roasts.

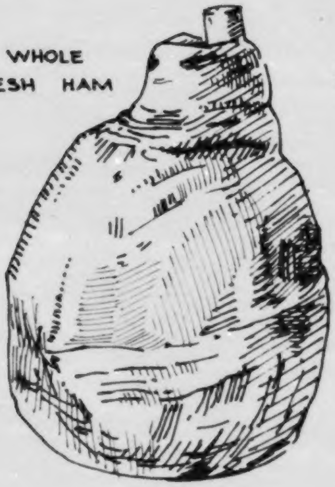
   The full loin half is sometimes boned completely to make for easier carving.



FULL RIB HALF

4. Full rib half: A full rib half weighs from 5 to 7 pounds.

The presence of many bones makes for the particularly sweet flavor of this type of roast. Although not the best available, it is considered by many an excellent dish and a good buy.



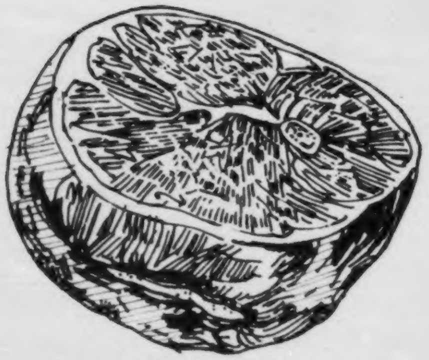
WHOLE FRESH HAM

5. Fresh ham: The fresh ham, really the leg of pork, has firm, lean meat and weighs from 12 to 16 pounds.

Its quality can be recognized by the firmness of its meat, the whiteness of its fat, and the marbling of its surface.

A whole fresh ham is enough to feed almost 20 people. Whole hams are occasionally sold completely boned.

Fresh hams are often cut into two parts before being sold.



FRESH HAM: BUTT HALF

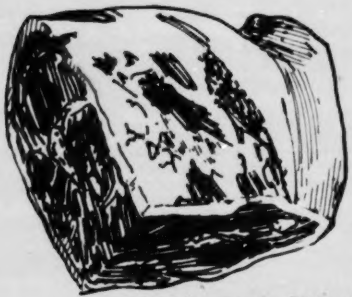
The butt is the more expensive of the two, because it has more lean meat. It is the harder one to carve.

FRESH HAM : FULL SHANK HALF

The full shank end of a fresh ham is less meaty but easier to carve.

6. **Fresh shoulder of pork.** The shank part of the fresh shoulder of pork is often called fresh picnic ham or Calais (callie) ham.

Picnic hams weigh from 5 to 8 pounds. Although not as lean as the true fresh ham, a picnic is nevertheless a very flavorful, inexpensive, fresh pork roast.



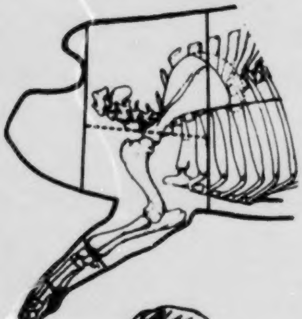
FRESH PORK SHOULDER
or
FRESH PICNIC HAM

The whole shoulder of pork can be roasted as is, but the complicated bone structure makes carving difficult.

Shoulder of pork is often sold trimmed of its surface fat, boned, rolled, and tied, for a better appearance and greater ease in carving.

Shoulder of pork is moderately priced and certainly a good buy for the housewife.

Shoulder of pork is rarely used in commercial kitchens in the United States.



7. **Boston butt:** The Boston butt is also called shoulder butt. It is often cured and smoked by the processors.

Boston butt is extremely fat and contains the most waste of all roasts listed, making it a poor buy – even considering its low price and the excellent flavor of the meat it provides.

Boston butts weigh around 5 pounds, but due to the high percentage of waste can feed only 4 to 6 people.

BOSTON BUTT

Pork Chops and Steaks

The quality of a pork chop or steak depends on the part of the pork it comes from.

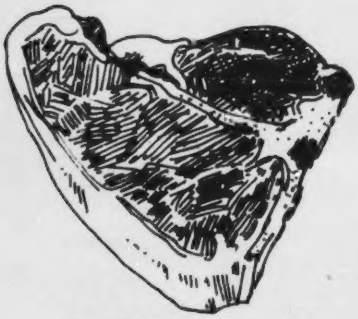
Only four different kinds of pork chops are sold, and their quality can be judged fairly easily by their appearance.

The main thing to look for is the amount of meat, bone, and fat in relation to each other.

A smaller weight of good quality pork chops – even at a higher cost per pound – will often furnish a better and more substantial meal than a greater amount of less expensive pork chops – and cost no more.

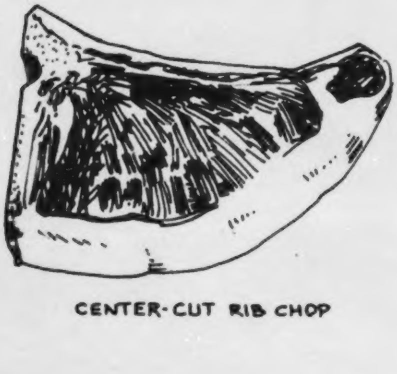
Pork chops can be broiled or baked. They are always cooked well-done, but without letting the meat get dry – a common occurrence in too many kitchens.

The four types of pork chops and the three types of pork steaks are listed below in order of decreasing overall quality.



CENTER-CUT LOIN CHOP

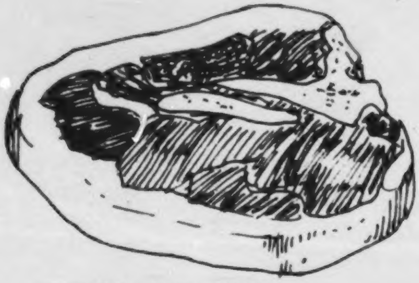
1. **Center-cut loin chop:** This chop includes some filet and is the meatiest and most expensive of the chops. This is the only kind used in restaurants and hotels of high standards.



CENTER-CUT RIB CHOP

2. **Center-cut rib chop:** The meat of this chop is of the same quality as in the center-cut loin chop but does not include any of the much-appreciated tenderloin.

   Center-cut rib chops are the most widely used in commercial kitchens. Their price is slightly lower than center-cut loin chops, and their appearance is perhaps better.

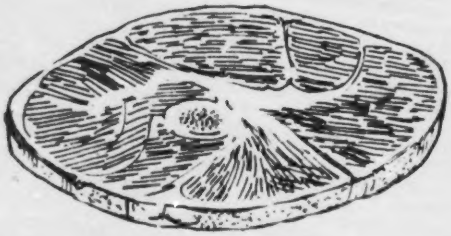


LOIN END CHOP

3. **Loin-end chop:** This is often referred to as a sirloin or hip pork chop. Loin-end chops contain less meat and more bone than the two previously described chops. Priced substantially lower than center-cut rib chops and center-cut loin chops, they are often a good buy for the home cook.

RIB END CHOP

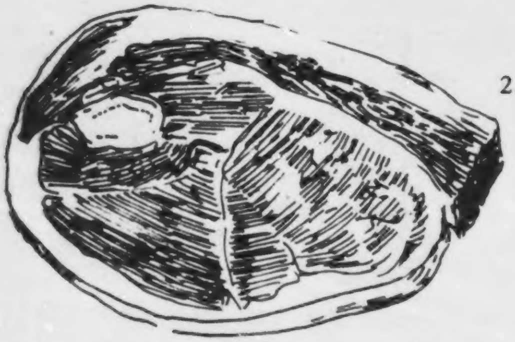
4. The **rib-end or shoulder chop** is very tender, but its high fat content makes it a poor buy even at its usually low price.



FRESH HAM STEAK

1. **Fresh ham steak:** Fresh ham steaks are cut from the shank end of the whole fresh ham and are usually very regular in size and shape.

   Fresh ham steaks are best when cut about one inch thick; this will be enough meat for two generous portions.



ARM or SHOULDER STEAK

2. The **arm or shoulder steak** is of lesser quality, but is generally far less expensive than the above. According to the appearance of the different cuts of ham steaks offered at the market on shopping day, the buyer can decide which one of them seems to be the best buy.

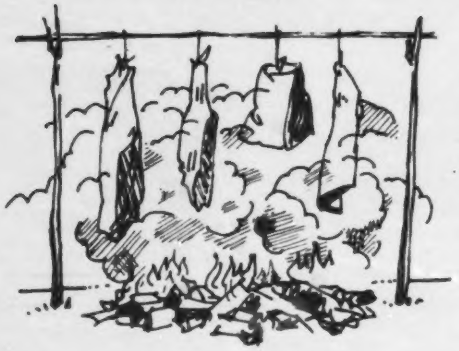
3. **Blade steak:** The blade steak is of less desirable quality. It contains a great amount of fat, bone, and gristle. Nevertheless it is often bought at a low cost for barbecues or other times when fun (or economy) is more important than culinary matters.

Curing and Smoking of Pork

Pork has been eaten in Europe for thousands of years.

The Gauls are known to have been very fond of pork; they raised a great many strong, healthy pigs.

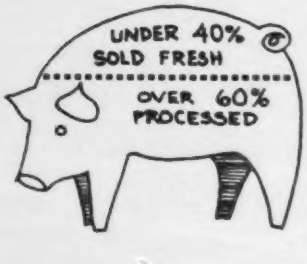
The curing of the meat came about as a necessity in order to preserve such a valuable food when it could not be consumed shortly after slaughtering.



The first method of curing is believed to have been by smoking; salting followed some time later.

Today curing is used more for its taste than for its preservative value. A light cure is used, and most cured meats still require refrigeration as if they were fresh.

Over 60 percent of the pork produced today undergoes some sort of processing – curing, smoking, cooking, or canning.



Curing

Curing is a process which utilizes salt to retard the growth of bacteria. Salt does not actually kill all the organisms present in meat, but it keeps their numbers down until the moisture content is reduced. Therefore the combination of salting and drying will preserve flesh for fairly long periods of time.

Sugar is usually added, both as a flavoring agent and because it helps maintain the color of the smoked meat.

The salting can be done in three ways:

A mixture of salt, sugar, spices, and preserving chemicals* is rubbed directly on the surface of the meat. The curing period takes several weeks for bacon, which is the product most frequently dry-cured this way.

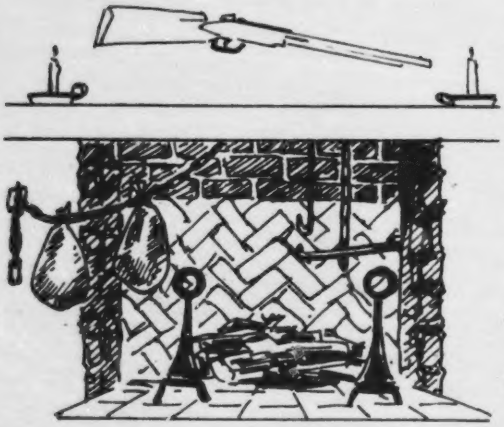
The meat is completely immersed in a brine solution of salt, sugar, spices, and chemicals.

A similar brine solution is injected into the pork itself.

A combination of the last two methods is often used.

Following brining, some meats are smoked and some are cooked without smoking.

To be labeled "Ham," after brining a cured pork leg must be shrunk back by smoking to its fresh weight. If the ham is not returned to its original weight, it must be labeled "Ham – Water Added." If the final moisture is more than 10 percent over the original weight, the label must read "Imitation Ham."



Smoking

Times are gone when hams hung high in the fireplace of every farmhouse.

Today smoking is done in modern, "air conditioned" smokehouses. The smoke is generated by burning hardwood sawdust. Cordwood heated to embers may be smudged with sawdust, or a flame may be directed against a pile of sawdust to create the smoke.

Smoke contains natural sterilizing agents, such as formaldehyde, creosote, methanol, and acetic acid. Most surface bacteria are killed, but not those inside the meat. The drying effect of the smoking, particularly of the surface of the meat, accounts for much of the preservative effect of long smoking.

The taste of the smoked meat will vary according to the length of the smoking process and the wood used. Hickory, maple, oak, birch or beech are all used, but hickory is preferred.

At the time of publication of this book, nitrates and nitrites were being used in processed and smoked meats. Studies were under way which might lead to banning or reducing the amount of nitrites, which have been found to cause cancer.

The minimum time for smoking is determined by the need for the internal temperature of pork products to reach at least 140°F. and be kept at that temperature for at least a half-hour. (The standards are set by the U.S. Department of Agriculture.)

Hams

Hams smoked for the least-permitted time will produce a very juicy, lightly smoked, mild-flavored meat. They are available in two styles: cook-before-eating, and fully cooked. The latter may be sliced and served cold, or merely heated briefly.

Heavy, long smoking produces a much drier product and the richer flavor and color characteristic of specialty hams such as prosciutto, Westphalian, and Smithfield hams. Westphalian hams are smoked using juniper brush rather than sawdust.

Smithfield hams are from peanut-fed hogs. They undergo a dry-salt curing and are smoked slowly for up to 30 days. They keep well without refrigeration, but are very sharp in flavor. This type of ham is usually soaked in water before it is cooked.

Lightly smoked hams are sold in a variety of ways: whole, divided, canned, formed, and rolled. Canned hams are cured but not smoked.

WHOLE HAM (BONE IN)

A whole ham (with the bone) is the least wasteful and most distinctively flavored cut you can choose.

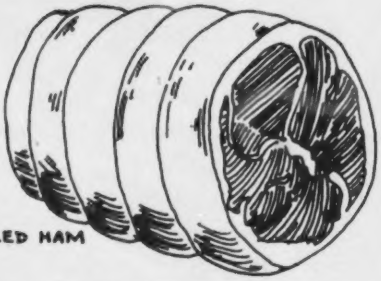
Hams weigh anywhere between 10 and 14 pounds, can feed a party of over 12 people with good appetites, and still leave enough leftovers for other delicious meals for the host and hostess.

BUTT HALF

The butt half is of a convenient size for the average family. When buying a butt half, make sure the label indicates *whole* butt half; if not, the first slice will probably be missing (sold as a ham steak), thus making the ham less of a good buy.

SHANK HALF

The shank half is less expensive because it contains less meat in proportion to the amount of bone. The bones can, however, be saved for making excellent soup.



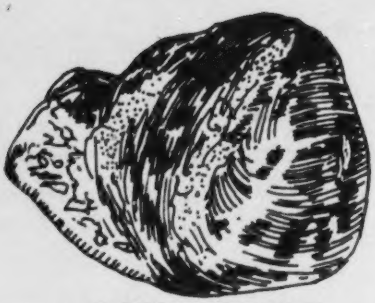
ROLLED HAM

Whole boneless hams, weighing between 8 and 12 pounds, can be purchased in a great variety of sizes and shapes.

FORMED HAM

For canned ham, the meat, after being boned, is custom-shaped and packed in cans or airtight plastic wrappers.

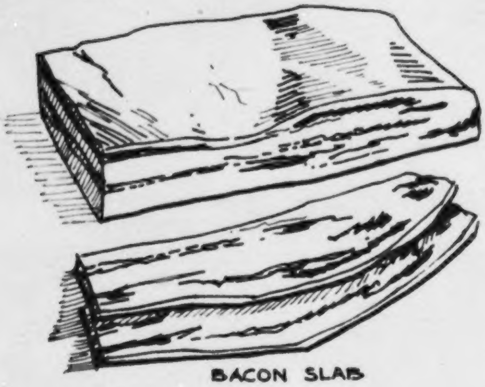
This can of ham will not have the superb flavor of the whole ham with the bone in, and yet will cost 20 to 30 percent more per pound, due to the labor and other expenses involved in processing.



SMOKED SHOULDER

Smoked shoulder, also known as picnic ham or Calais (callie) ham, is priced much lower than the other choices and is thus a smart buy for a good meal on a limited budget.

Bacon

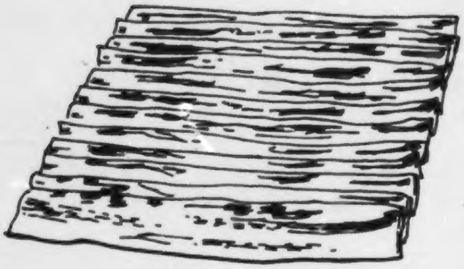


BACON SLAB

Bacon is generally cut from the belly of the pork and is practically always smoked.

Bacon is very popular as a breakfast food but is also an ingredient often used in the preparation of many hot and cold dishes, including Caesar salad and the famous BLT sandwich.

After curing and smoking, the thick outer rind of the bacon slab is removed. The slab is then sliced.



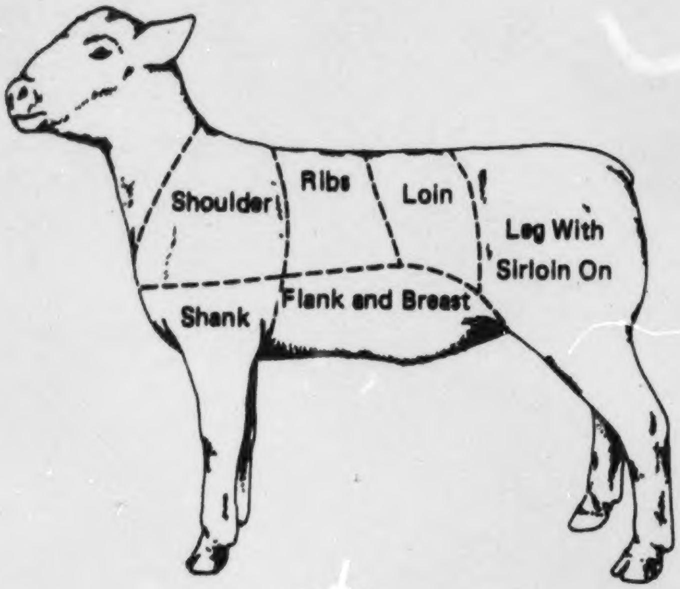
SLICED BACON

There are three different thicknesses of slices: regular, thick, and thin. The bacon is marketed in one-pound packages for retail stores and in 18-pound boxes for commercial use. The boxes contain three stacks of six one-pound layers.

It is obvious that the thickness of each slice will determine the number of slices found in each pound package:

Regular: 18 to 22 slices
Thin: 30 to 40 slices
Thick: 12 to 16 slices

It is rare these days to see hotels and restaurants slicing their own bacon from slabs. The cost of labor is the main reason.



Lamb

Lamb is the meat of young sheep, male or female, milk- or grass-fed, but slaughtered before they reach their second year.

When a sheep one year old is slaughtered, its meat is called mutton. Only 7 percent of the sheep stock in the U.S.A. is raised for mutton.

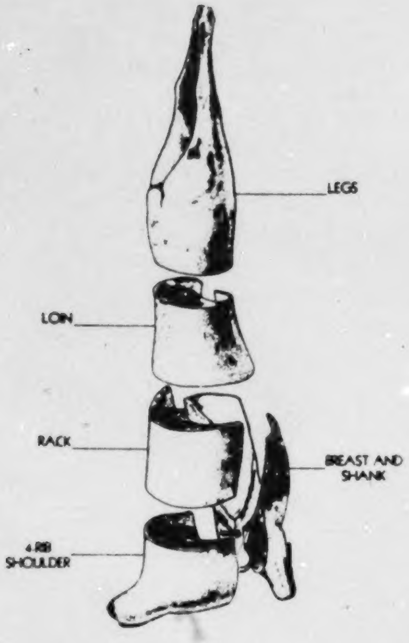
Lambis not one of the favored meats in the United States. Annual consumption of lamb represents only about 1 percent of the total amount of meat consumed by Americans.

Mutton is very seldom asked for and indeed is practically unavailable. The very word "mutton" seems to be used today only in a derogative way to downgrade lamb.

Genuine spring lamb: Genuine spring lamb is the meat of young animals from 3 to 5 months old that have fed only on their mothers' milk.

Genuine spring lamb is the best lamb available. Its meat is extremely tender, of a smooth grain, and light pink in color.

Genuine spring lamb is of course the most expensive lamb on the market.



Spring lamb: Spring lambs are between 5 and 10 months old when slaughtered.

Spring lambs are fed on grass and grain, and their flesh has started to mature. The grain is not as fine, and the color passes from light pink to deep pink or light red.

The meat of spring lamb is still very tender and has not yet acquired the strong flavor and aroma typical of older lambs.

Spring lamb is the most widely used lamb meat, both in the home and in commercial kitchens.

LAMB STEW

Yearling lamb or yearling mutton: Yearling lambs are slaughtered between the ages of 10 and 20 months.

Yearling lamb does not possess the fine qualities of the previously described lambs but is nevertheless far superior to mutton in tenderness and flavor.

Its moderate price makes it a reasonably good buy, especially for the preparation of stews and patties.

Inspecting and Grading

Lamb is inspected and graded by the U.S. Department of Agriculture in approximately the same manner as beef.

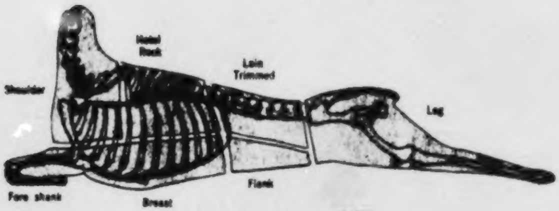
The meat of *yearling mutton* and *mutton* must be stamped with the *kind* of meat as well as the grade. The grade stamp alone appears on true lamb.

Unfortunately only the grading "Prime" is based on the age of the animal. The prime stamp guarantees the meat to be from a lamb between 3 and 5 months old.

"Choice" and "Good" are not guarantees of a certain age but only the indication of quality.

U.S. Prime lamb is not readily available in supermarkets. It is sold mostly in better butcher shops and by wholesalers to better eating places.

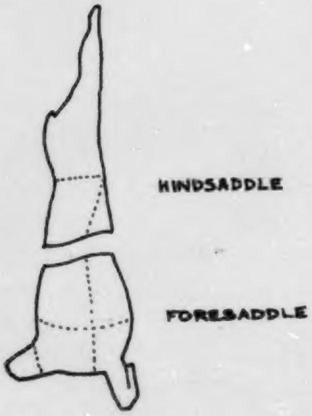
Since the stamp "U.S. Choice" does not reveal the age of the spring lamb, and since age is the most important factor in lamb quality, it is very hard, if not impossible, for the consumer (and many chefs) to predict by inspection the exact quality of the meat purchased.



LAMB CHART

Wholesale Cuts of Lamb and Their Bone Structure

Lamb cuts:

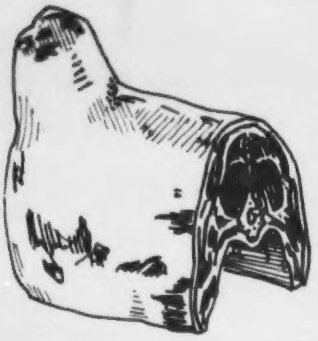


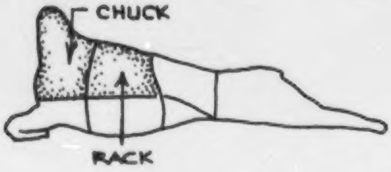
Lamb carcasses are usually purchased whole except by those outlets dealing in kosher meat.

The whole carcass weighs between 45 and 60 pounds and is divided across the midsection into two parts: the foresaddle and the hindsaddle.

The **foresaddle** represents 50 percent of the entire lamb and includes four of the primal cuts.

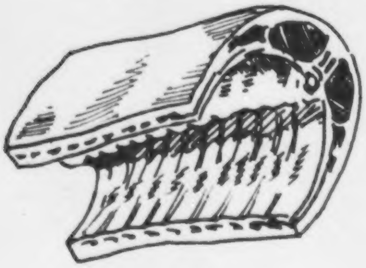
1. The chuck of lamb
2. The rack of lamb
3. The foreshanks
4. The breast of lamb





Chuck of lamb: The chuck of lamb represents 24 percent of the carcass and includes the neck, shoulder, and the upper part of the shank.

Since even the lowest quality cut in a lamb is still reasonably tender, chucks can be roasted or broiled. They are, however, used mostly for stews or braised after being boned and rolled.

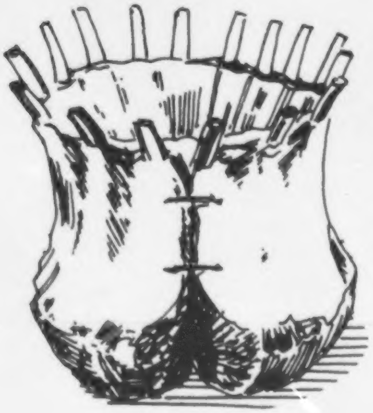


Rack of lamb: The rack comes from the rib section and is about 12 percent of the carcass.

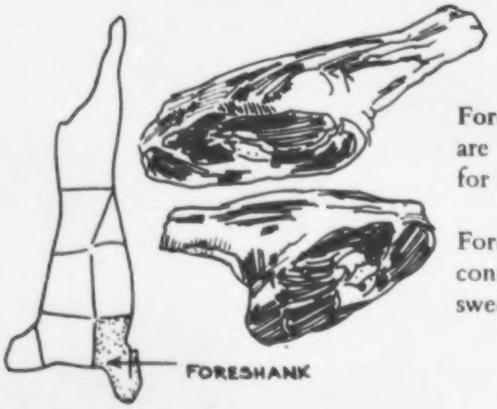
Rack is the part of the foresaddle yielding the most tender meat.

An average rack of lamb will furnish up to 14 lamb chops with very little gristle and connective tissue.

The first three or four chops cut from the front of the rib section are the meatiest and most desirable.

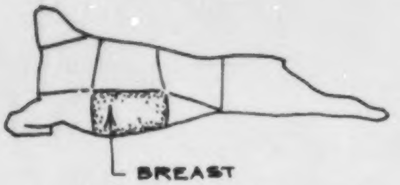


Racks of lamb are also used whole for roasting. They are often presented in the form of a crown, each rib-bone tip covered by a frilled paper chop holder.

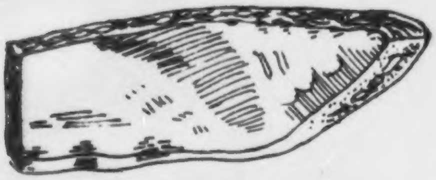


Foreshank: Foreshanks, the front legs of the lamb, are relatively inexpensive. Well-prepared, they make for really enjoyable dishes.

Foreshanks have a certain amount of gristle and connective tissue, but yield a good amount of sweet, moist, and flavorful meat.



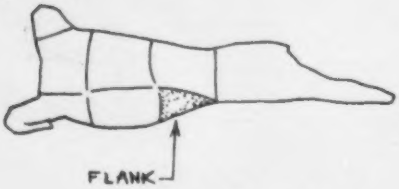
Breast of lamb: Breast of lamb is the least meaty section of the lamb.



The breast of lamb is often cut into lamb "riblets" for barbecuing.

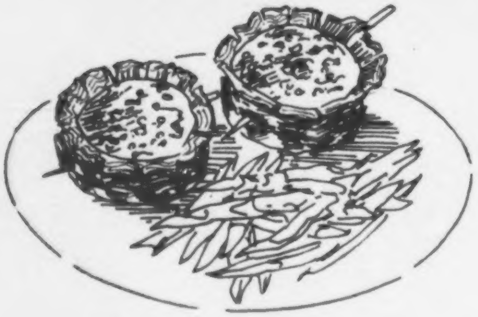
The breast of lamb can also be boned entirely and rolled as a roast. While nutritious, this roast is certainly of inferior quality.

Mostly, the meat of the breast is used for grinding in the preparation of patties, stuffings, and casseroles.



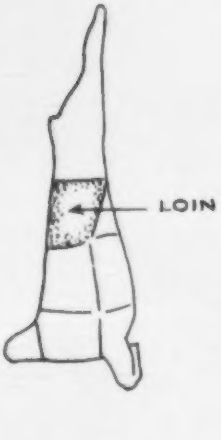
The **hindsaddle** is the rear portion of the lamb carcass and contains three primal cuts, two of them very desirable.

1. The flank of lamb
2. The loin of lamb
3. The leg of lamb



Flank of lamb: This is a very stringy cut of meat, some of which is too often found on expensive chops in the form of a longer "tail." (The so-called tail of a rib chop is the portion of the rib bone where very little meat is attached.)

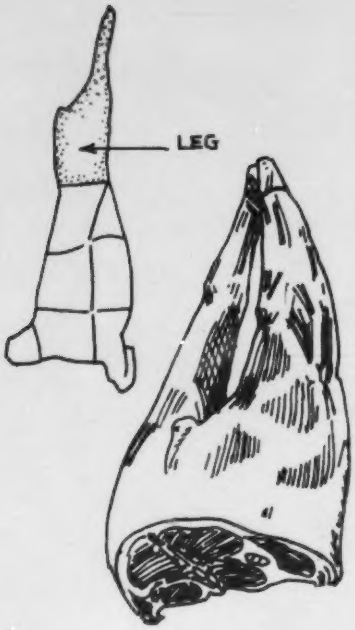
Flank meat is not really suitable for any cooked dishes and is thus mostly ground and used in patties.



Loin of lamb: The loin of lamb represents 11 percent of the all carcass and is the most tender cut of lamb.

Chops cut in the loin of lamb resemble miniature porterhouse steaks. They include a part of the filet.

The high price of loin of lamb prohibits its use as a roast for most people.



Leg of lamb: The leg of lamb is the meatiest cut of the lamb, representing 30 to 35 percent of the carcass.

Legs of lamb, baked or roasted, are fairly easy to carve at the family table.

More and more often, hotels and restaurants use the prepared leg of lamb, boned and rolled, and slice it with a slicing machine.

Legs of lamb vary in weight from 5 to 9 pounds.

Leg of lamb is as a rule eaten hot but is appreciated by many, especially in France, as a cold meat dish.

Lamb is easily digested. It is considered a good item in the diet of people recuperating from illnesses and is also recommended for small children.

Nutritionally, lamb, like other meats, is an excellent source of complete protein, and contributes substantial amounts of iron, B-vitamins, and other nutrients to the body.

The fat of lamb is the most highly saturated of all the meat fats. Lamb meat is also higher in cholesterol content than the other meats.

Americans like the leg of lamb cooked well done. (It is amazing how many orders of roast lamb are returned to the chef by customers who find the slightest trace of pink in the meat).

In France, the leg of lamb is preferred cooked medium by the great majority, and rare by most of the others.

Lamb roasts: There are seven basic roasts in a lamb carcass:

1. Whole leg of lamb
2. Shank half of leg
3. Sirloin half of leg
4. Boneless shoulder of lamb
5. Shoulder of lamb (bone in)
6. Rack of lamb
7. Loin of lamb

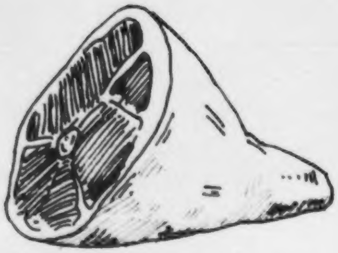
LEG of LAMB

Whole leg of lamb

A leg of lamb averages between 5 and 9 pounds and includes both the sirloin or rump and the shank portion.

The whole leg of lamb is the meatiest roast and therefore the most economical, both at home and in commercial food establishments.

A whole leg of lamb of good quality should be firm, well rounded, and covered by a minimum of white, firm fat.



SHANK HALF of LEG

Shank half of leg: This is the meatiest and easiest-to-carve portion of the leg.

It is not used in commercial kitchens, where it is more profitable to use the whole leg.

The shank half of leg has also a tendency to lose some of its juices – as do all roasts cut out of a whole primal cut.

SIRLOIN HALF of LEG

Sirloin half of the leg: The sirloin half has a lot of bone, but the meat it yields is excellent, and its moderate price makes it a fairly good value.

Shoulder roasts

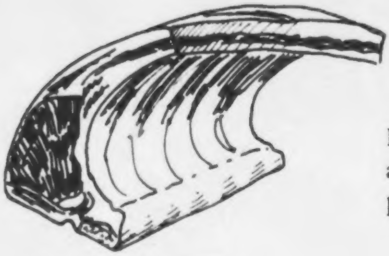
ROLLED BREAST

The boneless shoulder is a tasty cut but it contains more fat in proprotion to the lean meat than the leg does.

The boned and rolled breast of lamb will give slices of rather poor appearance which are, nevertheless, tasty and satisfying.

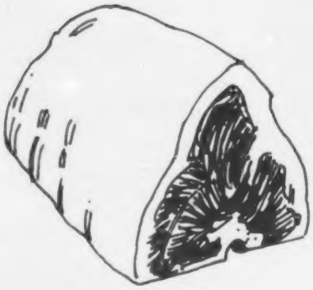
SHOULDER of LAMB (BONE-IN)

The shoulder of lamb cooked with the bones in is very hard to carve, but many prefer it to the boneless kind, arguing that the presence of bone is necessary for maximum flavor and juiciness.



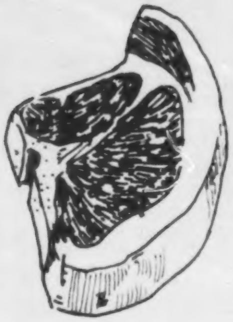
RACK of LAMB

Rack of lamb: The rack of lamb is the best meat available in lamb roasts, but its very high cost and poor yield keep it away from the average table.



LOIN of LAMB

Loin of lamb: Few people ever see a whole loin of lamb because practically all loins of lamb are cut into portion-size chops. Its almost prohibitive price makes it accessible to only the wealthy.

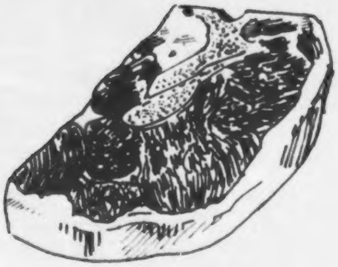


LOIN CHOP

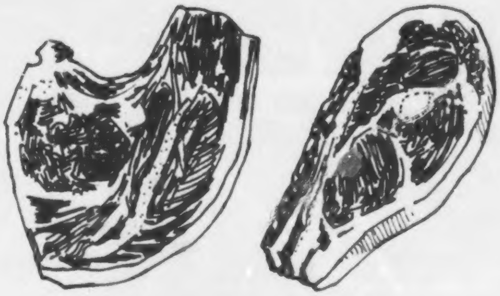
Lamb chops and lamb steaks:

Lamb chops and lamb steaks are cut from the different primal cuts in portion sizes.

Given a high-quality carcass, the quality of the various cuts will depend mostly on the ratio of meat, bone, and fat. The prices will sometimes vary greatly, and if one remembers that lamb meat, especially cut thin, is always tender, the main basis of choosing will be appearance.

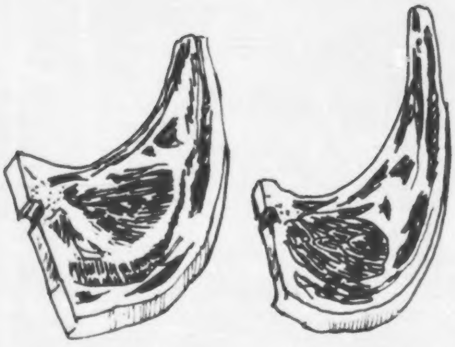


SIRLOIN CHOP



BLADE ARM

SHOULDER CHOPS



SHOULDER END LOIN END

RIB CHOPS

COST FOR A SERVING OF MEAT AT VARIOUS PRICE LEVELS

Cost Per Pound	APPROXIMATE COST PER SERVING 1½ Servings per Pound	2 Servings per Pound	2½ Servings per Pound	3 Servings per Pound	3½ Servings per Pound	4 Servings per Pound	5 Servings per Pound	6 Servings per Pound
$ .39	$ .26	$ .20	$ .16	$ .13	$ .11	$ .10	$ .08	$ .07
.49	.33	.25	.20	.16	.14	.12	.10	.08
.59	.39	.30	.24	.20	.17	.15	.12	.10
.69	.46	.35	.28	.23	.20	.17	.14	.12
.79	.53	.40	.32	.26	.23	.20	.16	.13
.89	.59	.45	.36	.30	.25	.22	.18	.15
.99	.66	.50	.40	.33	.28	.25	.20	.17
1.09	.73	.55	.44	.36	.31	.27	.22	.18
1.19	.79	.60	.4[illegible]	.40	.34	.30	.24	.20
1.29	.88	.65	.52	.43	.37	.32	.26	.22
1.39	.93	.70	.56	.46	.40	.35	.28	.23
1.49	.99	.75	.60	.50	.43	.37	.30	.25
1.59	1.06	.80	.64	.53	.45	.40	.32	.27
1.69	1.13	.85	.63	.56	.48	.42	.34	.28
1.79	1.19	.90	.72	.60	.51	.45	.36	.30
1.89	1.26	.95	.76	.63	.54	.47	.38	.32
1.99	1.33	1.00	.80	.68	.57	.50	.40	.33
2.09	1.39	1.05	.84	.70	.60	.52	.42	.35
2.19	1.46	1.10	.88	.73	.63	.55	.44	.37
2.29	1.53	1.15	.92	.76	.65	.57	.46	.38
2.39	1.59	1.20	.96	.80	.68	.60	.48	.40
2.49	1.68	1.25	1.00	.83	.71	.62	.50	.42
2,59	1.73	1.30	1.04	.86	.74	.65	.52	.53
2.69	2.79	1.35	1.08	.90	.77	.67	.53	.45

SERVINGS PER POUND TO EXPECT FROM A SPECIFIC CUT OF MEAT

The servings per pound are only a guide to the average amount to buy to provide 3 to 3½ ounces of cooked lean meat. The cooking method and cooking temperature, the degree of doneness, the difference in the size of bone in the bone-in cuts and amount of fat trim are some of the factors that vary and will affect the yield of cooked lean meat.

BEEF

Steaks

Chuck (Arm or Blade)	2
Club	2
"Cubed"	4
Filet Mignon	3
Flank	3
Porterhouse	2
Rib	2
Rib Eye (Delmonico)	3
Round	3
Sirloin	2½
T-Bone	2
Top Loin	3

Roasts

Rib, Standing	2
Rib Eye (Delmonico)	3
Rump, Rolled	3
Sirloin Tip	3

Pot-Roasts

Arm (Chuck)	2
Blade (Chuck)	2
Chuck, Boneless	2½
English (Boston) Cut	2½

Other Cuts

Brisket	3
Cubes, Beef	4
Loaf, Beef	4
Pattics, Beef	4
Short Ribs	2

Variety Meats

Brains	5
Heart	5
Kidney	5
Liver	4
Sweetbreads	5
Tongue	5

PORK

Chops and Steaks

Blade Chops or Steaks	3
Boneless Chops	4
Fresh Ham(Leg) Steaks	4
Loin Chops	4
Rib Chops	4
Smoked (Rib or Loin) Chops	4
Smoked Ham (Center slice) Steaks	5

Roasts

Ham (Leg),Fresh, Bone-in	3
Ham(Leg),Fresh,Boneless	3½
Ham, Smoked, Bone-in	3½
Ham, Smoked, Boneless	5
Ham, Smoked, Canned	5
Boston Shoulder (Rolled) Boneless	3
Loin, Blade	2
Loin (Rolled), Boneless	3½
Loin, Center	2½
Loin, Smoked	3
Picnic Shoulder (Bone-in) Fresh or Smoked	2
Sirloin	2
Smoked Shoulder Roll (Butt)	3

Other Cuts

Back Ribs	1½
Bacon (Regular) Sliced	6
Canadian-Style Bacon	5
Country-Style Back Ribs	1½
Cubes (Fresh or Smoked)	4
Hocks (Fresh or Smoked)	1½
Pork Sausage	4
Spareribs	1½
Tenderloin (Whole)	4
Tenderloin (Fillets)	4

Variety Meats

Brains	5
Heart	5
Kidney	5
Liver	4

LAMB

Chops and Steaks

Leg Chops (Steaks)	4
Loin Chops	3
Rib Chops	3
Shoulder Chops	3
Sirloin Chops	3

Roasts

Leg (Bone-in)	3
Leg (Boneless)	4
Shoulder (Bone-in)	2½
Shoulder (Boneless)	3

Other Cuts

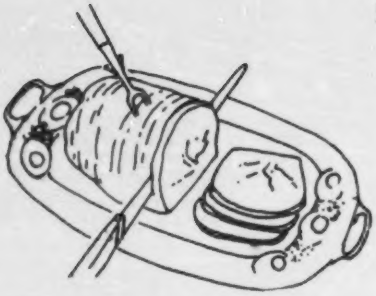
Breast	2
Breast (Riblets)	2
Cubes, Lamb	4
Shanks	2

Variety Meats

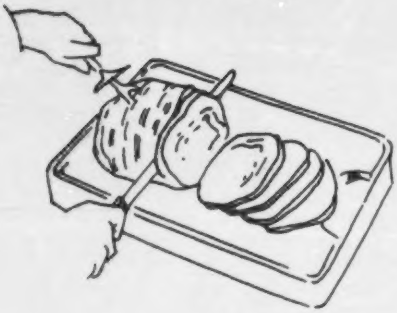
Heart	5
Kidney	5

From "Teaching About Meat", National Livestock and Meat Board, 1972

MEAT CARVING*

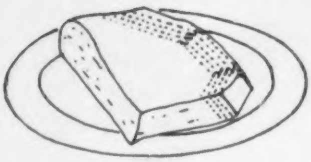


Rolled roasts (pork, lamb, veal, and beef) can be devised from any section of meat. They are generally from the shoulder, leg, round, or chuck. The general method of carving is to slice down vertically from the top of the roast to the cutting surface. Remove the strings only as you come to them to prevent the roast from falling apart.

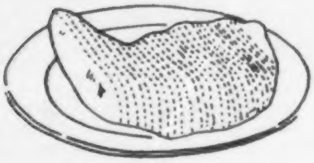


Rib-eye roast (beef) is carved almost identically to any other rolled roast, except that the knife is held at a slight angle (as illustrated) to help keep the juices in the meat.

Stuffed roasts (pork, lamb, beef, veal). – Carving a stuffed boneless roast shoulder or breast couldn't be simpler. The slices are simply vertical from the top of the roast to the cutting board. Two hints may be helpful: Do not remove any strings until you reach them, and serve the slices with the help of a spatula to keep the stuffing intact.



Brisket and corned beef should be ultra-thinly sliced. Before proceeding to carve, remove any excess fat. Then, startingat the round end, cut slanting diagonal slices from three planes in rotation. This method keeps the size of the slices constant as you proceed to carve down the brisket.



Tongue is another fibrous cut that should be thinly sliced for greatest tenderness. Place the tongue on its side with the tip to the left and slice downward and at a slight angle as illustrated.

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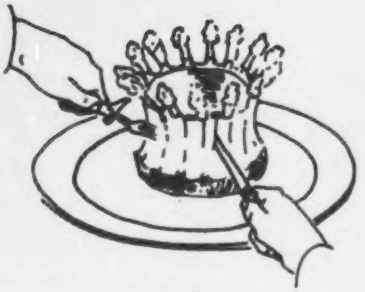
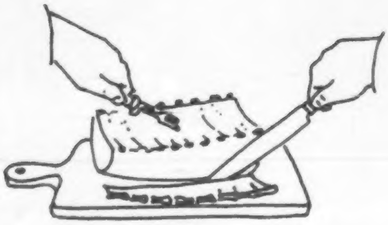
* Text and Illustrations from the National Livestock and Meat Board, Chicago, slightly adapted.

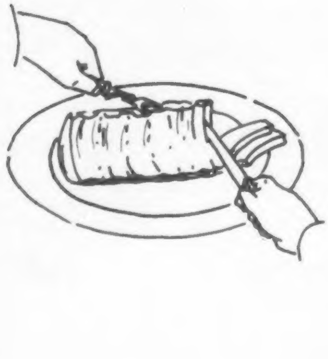


Crown roasts (pork or lamb) may look complicated to carve, but they are really very easy. You simply divide the spectacular-looking crown into separate chops by cutting straight down between each pair of ribs. Remove each chop as it is carved and allow two chops per serving.

Loin of Pork: Carving a loin of pork is a simple, two-step procedure if the rib bones are sawed through to separate them from the backbone. This is the way a pork loin is usually prepared before it is wrapped at the supermarket. Unless this has been done, however, the task of carving is difficult at best, and at worst practically impossible. Before you buy it, make certain the ribs have been sawed. The backbone becomes loosened during roasting, and is easily removed.

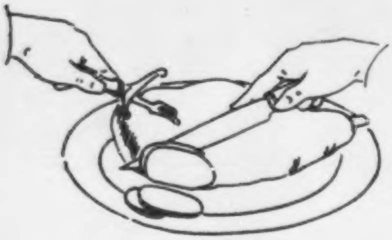


Step 1. Remove the backbone, as illustrated. Insert the tip of your knife between the backbone and the ribs and run it around and over the backbone, detaching it as cleanly as possible.

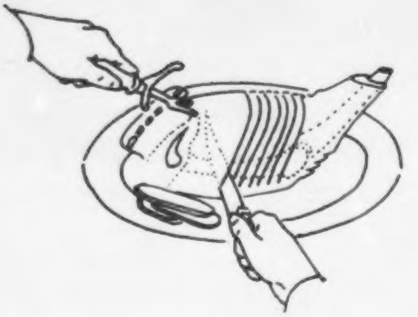


Step 2. Place the meat on its broad end, with the tips of the rib bones facing you. Slice downward between each pair of ribs, allowing one chop per serving. For thinner slices and servings half that big, cut as close to the bone as possible and along its side, alternating boneless slices with those that contain a bone.

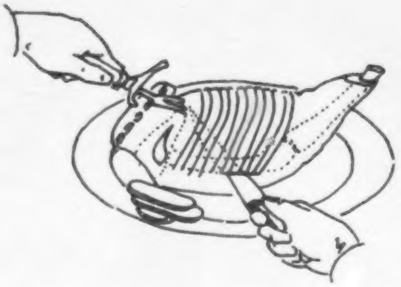
Leg of lamb is one of the more complicated cuts to carve and may require some practice on your part before performing in the presence of others.



Step 1. Remove a few lengthwise slices from the underside of the roast in order to form a broad base on which to rest it. Then turn the lamb on the base. If it is a left leg (like the one in the illustration), the protruding leg bone will be to your right. If it is a right leg, the bone will be to your left. This is an opportunity for you to steady the roast by grasping the shank end in your hand, with the use of the napkin if you wish.

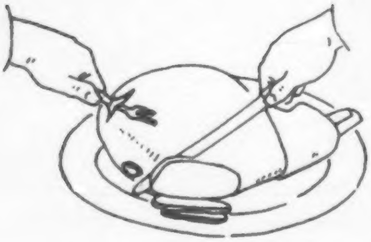


Step 2. Assuming the leg is a left one, and the bone is to your right, start at a point near the protruding shank bone and carve downward to the bone and toward you. (For a right leg slice downward and away from you.) Make thin parallel slices, as shown.

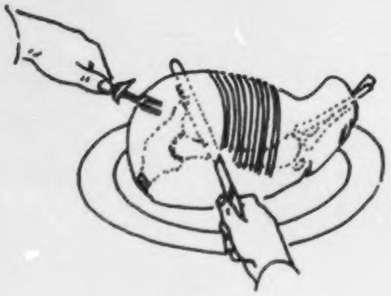


Step 3. After you have completed slicing the most choice center section, remove the slices of lamb from the bone by running your knife underneath them. Serve these slices first. For additional slices, the easiest way to carve the meat remaining on the bone is to remove it from the bone entirely.

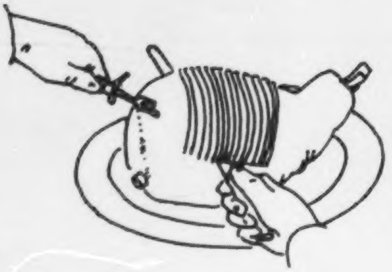
Ham: A whole baked ham – either fresh or smoked – is carved by a method similar to that for leg of lamb.



Step 1. The shank end is always placed to the right of the carver. The lengthwise initial slices are then removed from the thin side of the ham in order to form a base on which it can sit. If the ham is a right leg of pork, the lengthwise slices are removed from the nearer side. (An anatomical tip: differentiate between a right and a left ham by the bony kneecap. A right leg contains the kneecap on the side nearest the carver. A left leg contains the kneecap on the side farthest away.)

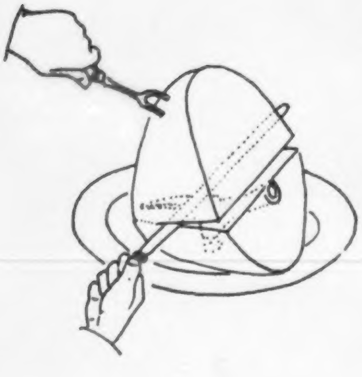


Step 2. Cut a series of parallel slices perpendicular to the length of the leg bone.

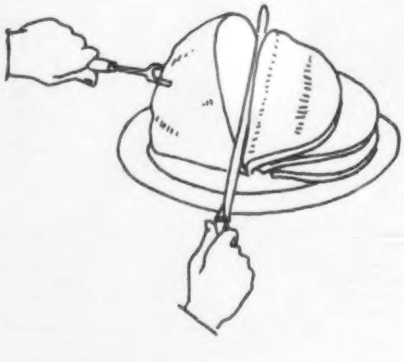


Step 3. All the slices can then be removed at one time – neatly and efficiently. Just run the knife underneath them along the bone. If more slices are desired, remove additional lengthwise slices from the base.

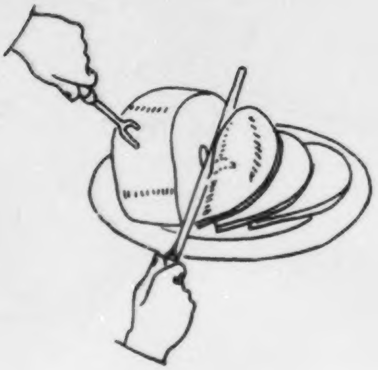
Ham (shank half): Carving the shank half of ham is a fairly simple affair, because the only bone is clearly visible on the cut side.



Step 1. Detach the thick upper portion of the ham by running the knife along the top of the bone, as illustrated.

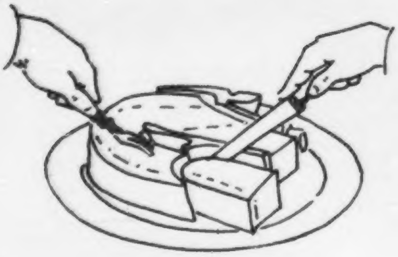


Step 2. Slice it, freshly-cut side down, at the side of your cutting surface.

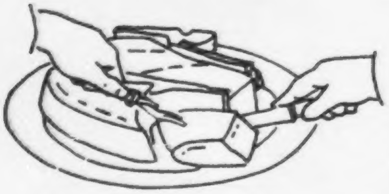


Step 3. The lower portion of the shank may then be sliced by removing the bone entirely with the tip of the knife. The now boneless piece is then inverted, bottomside up, and sliced in the same way as the upper portion.

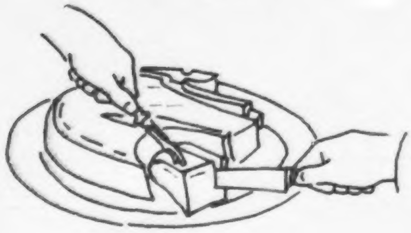
Chuck blade pot roast: An unboned chuck blade pot roast has natural dividing lines of bone and connective tissue that are easily visible. It is these patterns that your knife should follow when carving the blade roast in order to extract the largest solid sections of meat.



Step 1. Remove all the bones with your knife.

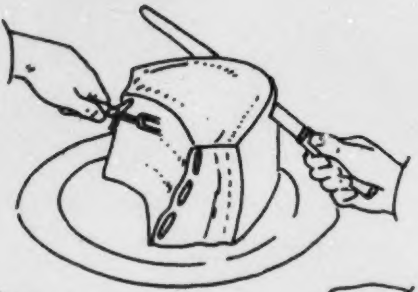


Step 2. Following the illustration, fork each section perpendicular to the grain of the meat.

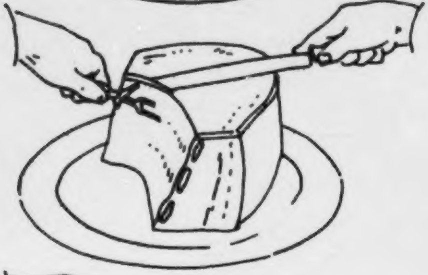


Step 3. Slice downward against the grain of the meat into sections one-quarter to one-third inch thick. This cut may also be purchased boned, rolled, and tied for pot roasting – which would certainly make a carver's task easier.

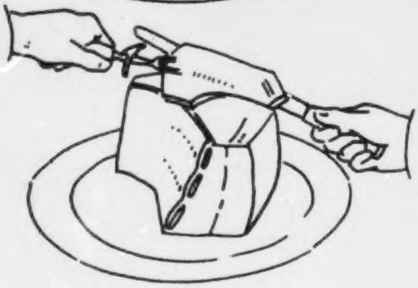
Beef rib roast: A standing rib roast is not as intimidating to carve as it looks. The roast is placed face down with the rib bones to the carver's left, the meat side to the right.



Step 1. Stick the fork between the ribs to hold the cut firmly, and slice straight across from right to left – horizontally.

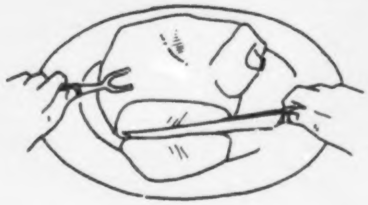


Step 2. Free each slice from the bone as it is carved by running the tip of the knife along the edge of the rib bones.

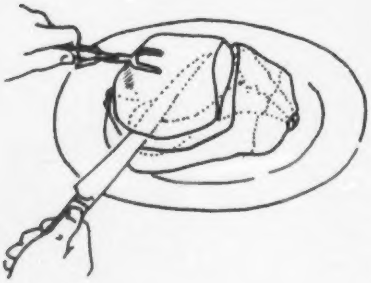


Step 3. Lift the slice to the serving platter by sliding the knife under it and pinning it down with the fork. One slice is an ample portion. Continue slicing horizontally until you have as many slices as you need. Slices may be ultra thin or up to one-half inch thick, depending upon your preference.

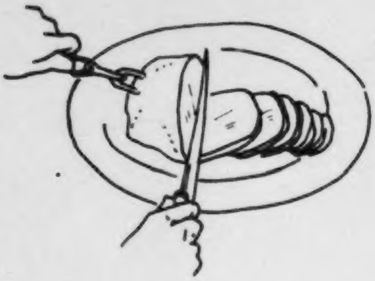
Shoulder of pork (or smoked picnic ham) is complicated to carve because of its interior bone structure and will require considerable patience and practice to master. If the effort seems more than you can master, it is suggested that you purchase this cut de-boned. If, however, you want to try your hand at it, here's how:



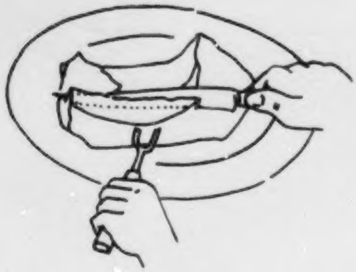
Step 1. Remove a few lengthwise slices, as illustrated, from the bottom – or smaller side – of the roast to form a steady base on which it will rest.



Setp 2. Turn the roast over on its base. Find the point on top of the shoulder where the elbow ends, and slice down just in front of it. Then, turn the knife blade to the left, and slice along the length of the arm bone to its end, Freeing the entire upper section of the meat from the bone.

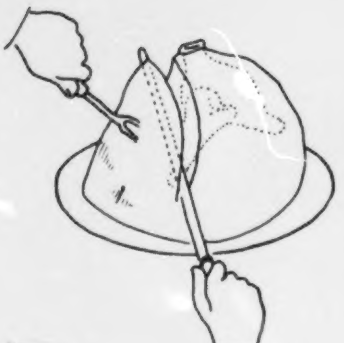


Step 3. Slice this boneless section of meat separately on the side into a series of perpendicular, equal slices.

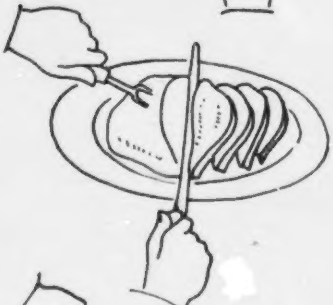


Step 4. The remaining meat is then removed with the tip of the knife from both sides of the arm bone. These two rather randomly shaped boneless pieces of shoulder can be sliced thinly — but the slices will not be as uniform in size nor as attractive as the other slices.

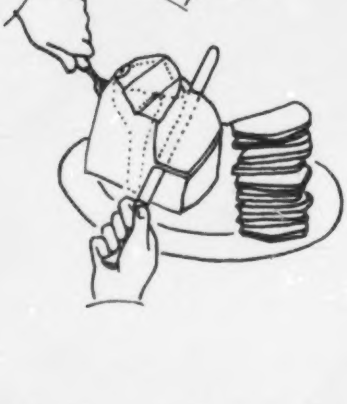
Butt half of ham has an interior bone structure that is quite complex and difficult for the inexperienced carver. It is a far greater challenge to carve the butt end of a ham than the shank half. To dissect the butt, proceed as follows:



Step 1. Put the butt on the cutting surface, cut side down. Remove a large boneless piece of meat from the side of the ham by slicing down from the top, along the interior bone, all the way to the cutting board.



Step 2. Place the boneless piece of butt on its freshly cut side and carve it into thin, crossgrain slices.



Step 3. The meat remaining on the other side of the butt can be carved like this: steady the roast with the fork and, using the knife, slice horizontally inward to the bone from right to left. Detach each slice from the bone with the sharp tip of the knife. Remove each slice as you carve it.

SERVING TIPS*

As you carve and serve, there are a few simple and sensible tactics you'll want to observe. It is hardly necessary to mention that neatness does count. But it is important, for instance, to prevent, as much as it is possible, the escape of the meat juices. In order to do so, try to keep the number of times you puncture the cut of meat with the fork to a minimum. Carve all the meat from a single side of a roast before embarking on another, and carve only the amount you will need to serve at one time. Meat cools and dries out more quickly after it has been cut, so carve additional slices later as they are needed.

Have warmed plates at hand to receive carved meat. Cool plates cause the juices to rapidly congeal, and make meat chillingly unappetizing.

If the beef or lamb you are carving is cooked medium or rare, reserve the first outer slices for people who prefer their meat on the well-done side. Most cuts will have an area containing the superior meat. Make certain to distribute the superior slices equally, allowing a slice from the choice area per plate, as well as one from the lesser regions.

Finally, if you are serving each plate as you carve, try not to be overly generous with the first few and then have to skimp on the last. Try to serve equal portions, so that no one gets short-changed.

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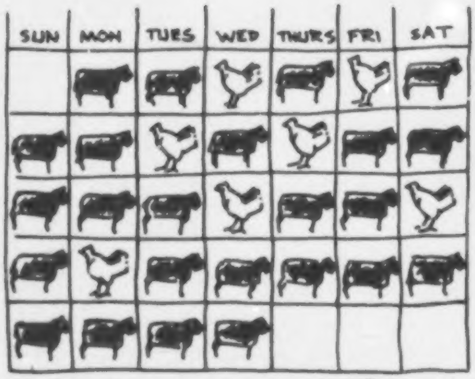
* From the National Livestock and Meat Board, Chicago, slightly adapted.

POULTRY

The term "poultry" refers to all edible domestic birds, including chickens, turkeys, ducks, geese, Cornish game hens, and guinea fowls.

"Fowl" is used often to mean poultry, although it should be used only to identify full-grown hens.

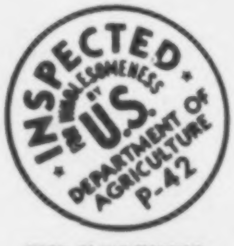
Poultry has been a staple in the diet of man for thousands of years. It is known that the Chinese emperors of long-vanished dynasties and the pharaohs of ancient Egypt knew and appreciated poultry dishes.



American consumption of
MEAT & POULTRY
(*almost 4 to 1*)

Americans are eating poultry at an average rate of 54 pounds per person per year (as of 1977) compared to 194 pounds of red meat.

Of this amount, 41 pounds are from broilers, 9 pounds from turkeys, and only 3 pounds from farm-raised chickens. Hence chicken is the most important kind of poultry from the standpoint of consumption.



SYMBOL OF WHOLESOMENESS

All poultry must by law be inspected for *wholesomeness,* either by state or Federal workers. The standards are the same regardless of who does the inspecting.

Grading for *quality* is optional and is paid for by the processors. Official standards are for U.S. grades A, B, and C. The only grade commonly found in stores, however, is grade A.

Grade A birds have good overall shape and appearance, are meaty, have a well-developed layer of fat in the skin, and are practically free from defects.

Poultry is a highly perishable food. The moist skin and interior surfaces provide excellent growing conditions for bacteria. Persons handling raw poultry should wash their hands immediately afterwards.

POULTRY

- ✓ Protein
- ✓ Minerals
- ✓ Vitamins
- ✓ Fewer calories
- ✓ Less-saturated fat

All poultry meat is very rich in high-quality proteins and other essential nutrients, such as iron, phosphorus, B-vitamins. Its fat is less saturated than that in red meat, and its cholesterol content is somewhat lower. All this makes poultry an excellent alternative to red meat.

The relatively modest cost of most poultry and its adaptability to countless recipes are further points in its favor.

Chicken:

Chicken is eaten all over the world. Many countries have originated chicken dishes of world renown: America's fried chicken, France's coq au vin, China's chicken-almond dishes, and India's chicken curry – among others.

The present domestic varieties of chicken have been developed by centuries of breeding from jungle fowl found in southeast Asia.

The day when our chicken supply came from small, family-run chicken farms is long since gone.

Chickens are now raised for meat in large, specialized farms producing up to 100,000 chickens at a time, three or four times a year. They live in well-designed housing with automated feed and water supplies.

These chickens include, according to their age, broilers, fryers, and roasting chickens.

READY FOR BROILING

Nowadays there is no true distinction between "broilers" and "fryers." Most chickens, marketed at 2½ to 4 pounds, can be called broiler-fryers.

READY FOR ROASTING

Technically, a broiling chicken (or "broiler") is sold when about 6 or 7 weeks old, and its weight is about 2½ pounds.

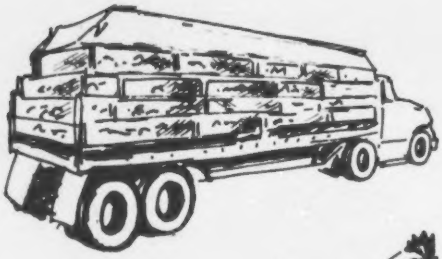
A frying chicken (or "fryer") is marketed at the age of 8 or 9 weeks, when it weighs between 3 and 4 pounds.

A roasting chicken is a larger and older chicken, sold when 9 to 16 weeks old and weighing well over 4 pounds.

The three terms used above, although used by meat marketers, are not used by the farmer-producer. To the producer they are all known as broilers.

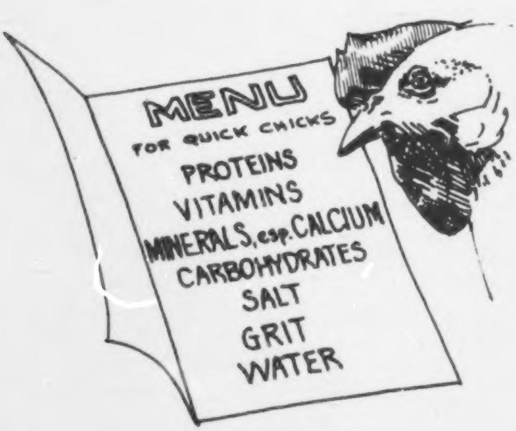
The production of broilers involves three separate phases:

1. Hatcheries specialize in hatching broiler chicks for sale to farmers.
2. Broiler farmers raise the chickens with scientifically mixed feed bought from another specialized company.
3. The broiler farmer sells the live broilers to yet another company that slaughters them and prepares them for market.

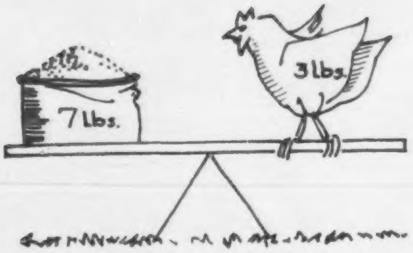


The chickens on a broiler farm are almost certain to be white, for the simple reason that most producers raise the breed known as White Plymouth Rock.

The White Plymouth Rock has white feathers, a yellow skin, and grows fast on a relatively small amount of feed.

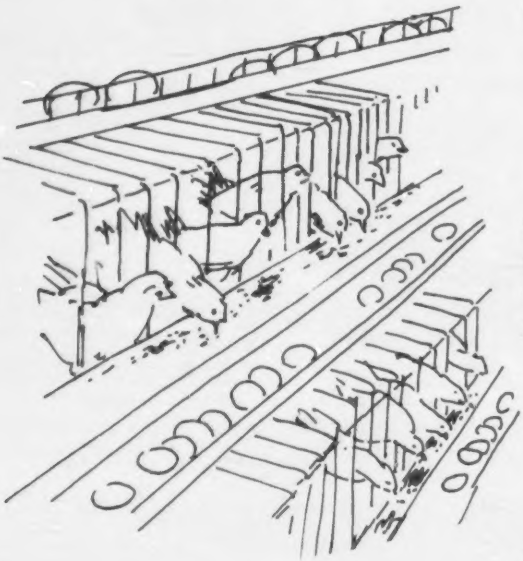


The mash used to feed broiler chicks generally includes ground corn, meat meal, fish meal, soybean meal, and minerals and vitamins.



It is interesting to know that no animal is more efficient than the chicken in converting feed to meat. With 7 pounds of scientifically prepared food, a farmer can raise a 3-pound broiler!

Hens or stewing chickens are mature female chickens that have laid eggs for one or more seasons. They are generally around one year old and weigh 3 to 5 pounds.

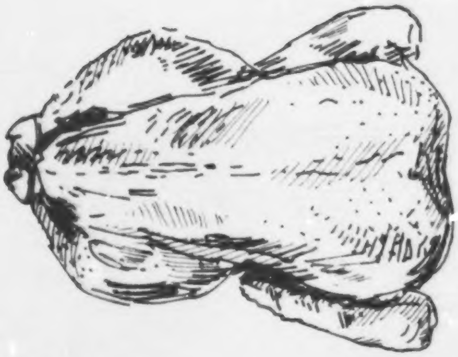


These chickens come, not from the "chicken factories," but from other farms that raise chickens for eggs. The hens are sold for market when their egg production decreases with age.

Hens are best used in stew-type dishes such as chicken fricassee and Brunswick stew, or in recipes calling for diced or cubed chicken: pot pies, curry, casseroles, creamed chicken, and chicken salad.

CHICKEN POT PIE

Once a very popular type of chicken, **capon** has fallen very low in its popularity as a food. Capons and caponettes are chickens desexed by physical or chemical means.



Capons grow bigger than ordinary broilers, averaging between 5 and 8 pounds.

The breast of capon is more developed, more tender, and more flavorful than the broiler's breast, and age does not substantially affect these qualities.

Due to the process involved, capon has always been more expensive than chicken.

Chickens are sold wholesale in wood-slat boxes lined with sulphurized paper. Ice fragments are distributed among the chickens to prevent spoilage during shipping.

Restaurants, hotels, and institutions generally buy whole chickens and cut them on the premises, either in halves or quarters.

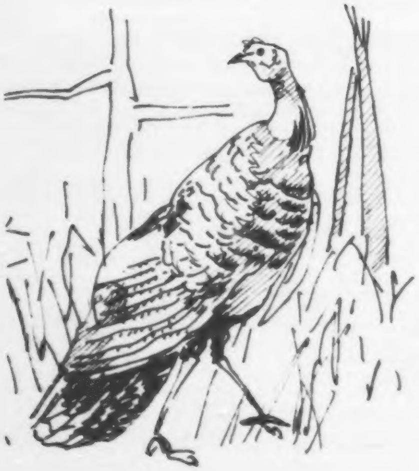
Meat merchants also sell halves, but the chickens are cut by electric saw, and the backbone is left attached to the breast, making for an inferior product if cooked as is.

Breasts and legs are also available separately, but at a higher price than whole chickens. These should be avoided by a well-organized food establishment, which should be able to make good use of all the parts of the chicken.

Chicken in all forms should be wiped carefully before use with a damp cloth.

Chickens purchased frozen should be thawed until flexible in the cooler (this will take a number of hours) or, still wrapped, in running (or frequently changed) cold water. The use of warmer water would create a great danger of contamination of the meat, due to the favorable conditions for an extremely rapid growth of bacteria.

Turkey:



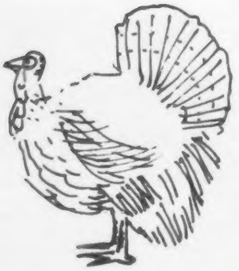
Turkey is a truly American bird. Wild turkeys were found in North America by the first white settlers and happily eaten by them.

The turkey meat eaten at the first Thanksgiving dinner was probably very tough, for the local wild bird had very little meat, and that was of inferior quality.

The same species of turkey was actually domesticated much earlier in Mexico by the Mexican Indians, and some of these turkeys were brought back to Europe in the early 16th century by the explorers.

Some domesticated turkeys were actually brought back to the New World by the early settlers of New England, but the wild turkeys were so abundant that most colonists preferred to hunt them rather than raise them.

Our present-day turkeys have been bred from that wild species.



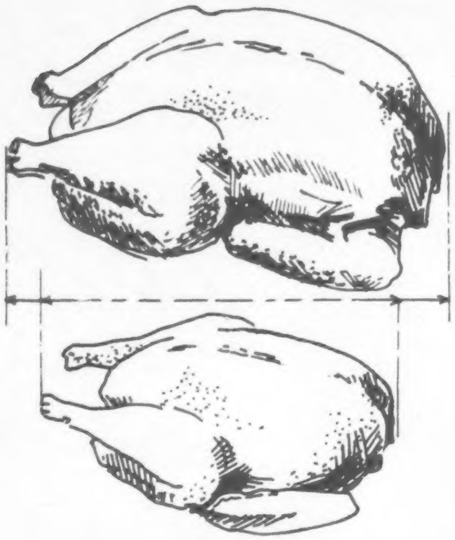
Turkey has been for many, many years the traditional main course of Thanksgiving and, to a lesser extent, Christmas dinners.

Its increased popularity as an all-year-round food item is due primarily to two factors:

The advent of modern refrigeration and freezing.

The development of large-breasted and meaty new breeds.

The most popular present breed is the Broad Breasted Large White. Its skin is free from the black dye sometimes left on other breeds by the pinfeathers, which made the skin look bruised.



A small turkey (6 to 10 lbs.) is *not* a young, immature turkey. It is a fully grown species developed by the U.S. Department of Agriculture to satisfy the growing demand for turkeys smaller than the average Broad Breasted Large White.

Turkeys are inspected and graded in the same way as chickens. Inspections for wholesomeness are compulsory; for quality, optional.

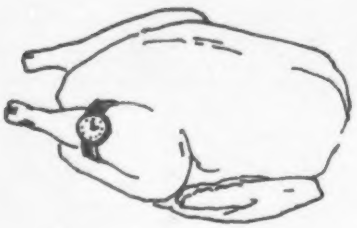
Although turkey quarters and parts are now available separately on the market, commercial kitchens prefer the whole, large turkeys weighing between 22 and 30 lbs.

The young tom turkey, weighing from 18 to 30 pounds, is used by most chefs for roasting, boiling, and in the preparation of dishes often called... chicken dishes!

A 20-pound tom turkey can be produced for market in 19 to 22 weeks.

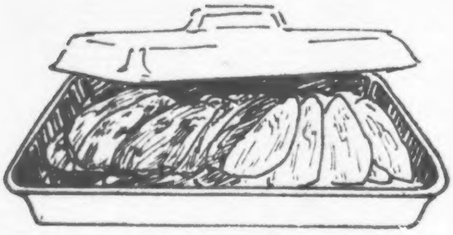
A young hen is an equally young female turkey, averaging 6 to 8 pounds for Beltsville Small White and 12 to 16 pounds for the Broad Breasted Large White.

Older turkeys, male and female, are produced to be marketed for food-processing plants. The large amount of meat they produce is lower in quality and rather tough. It is best boiled for use in hash, pies, and fricassees.



Chefs have to keep in mind that a 24-pound frozen turkey will likely require upward of 3 days of slow thawing in a 36°F. cooler or between 12 and 18 hours in constantly renewed cold water. Thaw the bird until pliable.

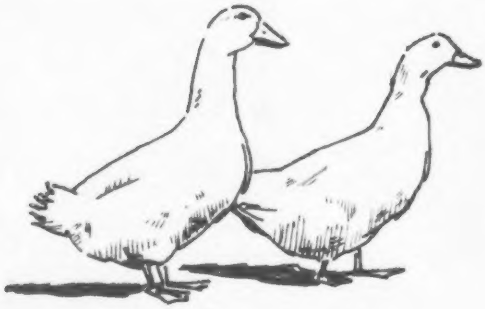
After handling raw turkey, wash your hands and all surfaces used in preparation of the bird.



Most turkeys for large-scale food operations are roasted unstuffed, usually the day before serving; they are sliced when cold and the slices reheated as needed.

Like chicken, turkey is an excellent source of high-quality proteins, iron, and B-vitamins. Ounce for ounce, chicken and turkey contain fewer calories than most other meats.

Duck:



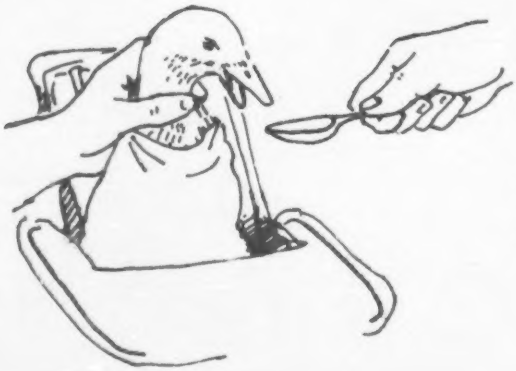
PEKIN DUCKS

Ducks are mentioned in oldest records as domesticated birds. The Pekin duck of Chinese origin is today the most important breed grown on large commercial duck farms in the United States.

The Pekin duck is white, well-feathered and fast-growing.

Two names associated with ducks are often heard: One is "Long Island," the other, "Western."

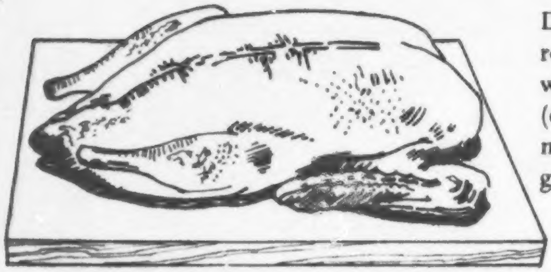
Both the "Long Island" duck and the "Western" duck are actually the Pekin breed.



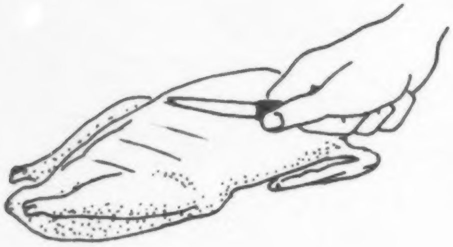
The "Long Island" duck is a duck specially fattened by force-feeding with a special grain diet. Most of the ducks available on the market today are of the Long Island type.

They are sold as young ducklings at the weight of 3½ pounds, or as ducklings at a weight of about 5 pounds.

"Western" ducks are of the same species as the "Long Island" ducks but are not especially fed and fattened. Their meat is not as tender, and Western ducks are very seldom sold in retail markets.



Ducks, in the United States, are usually served roasted – although many other dishes can be made with the meat, some of them very popular in Europe (e.g., the famous pâté de canard, a cold preparation made in the form of a meatloaf, with different ground meats and strips of duck meat).

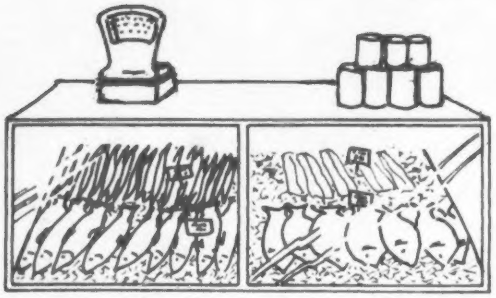


Duck is said by many to be too fat. The excess fat under the skin can be "let out" by scoring the skin of the entire bird at one-inch intervals before roasting. The duck should then be placed on a rack over the roasting pan.

Many people who say they do not like duck probably never ate a duck properly cooked; it was either greasy and slightly underdone or too crisp and tough from overcooking.

All duck meat is dark meat, and there is much less meat in proportion to fat and bones than in chicken and turkey. Hence it is not as economical a dish as they are.

FISH



Most fish are edible, and fish is a valuable alternative to meat and poultry.

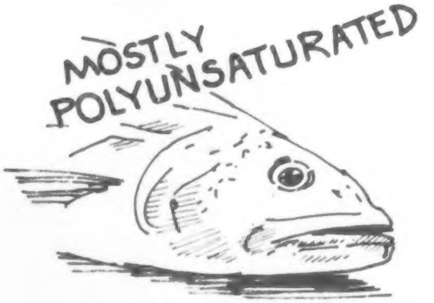
Despite its extreme perishability, fish is available today in all parts of the United States, thanks to modern transportation and refrigeration. Fresh fish (never frozen) can be found in markets located far from where they were caught.

Many of the common varieties of fish can be purchased frozen all year round.

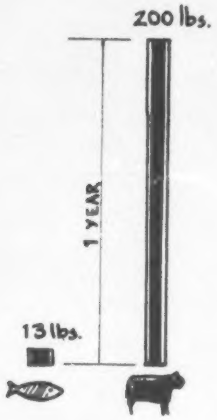
Fish has been used as food since prehistoric times, and the Bible hints of its importance before the Christian era.

Compared with red meat, fish has roughly the same protein content, although it may not be quite so rich in minerals and vitamins.

The amount of fat in fish varies from almost none (cod, haddock, whiting, sole) to 10% to 15% (salmon, mackerel, lake trout, and butterfish). This fat, however, is mostly polyunsaturated, tending to reduce the level of cholesterol in the blood.

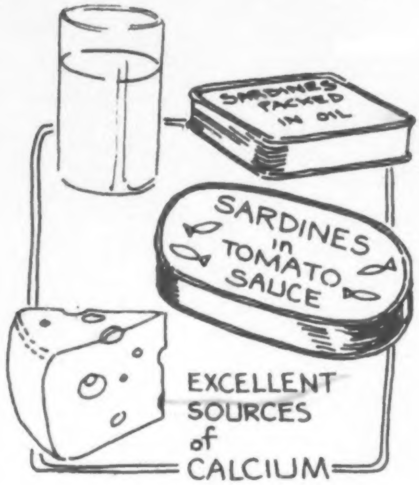


Even though fish has about the same cholesterol content as meat, modern nutritionists recommend fish over meat because of the very favorable ratio of polyunsaturated to saturated fats in fish.



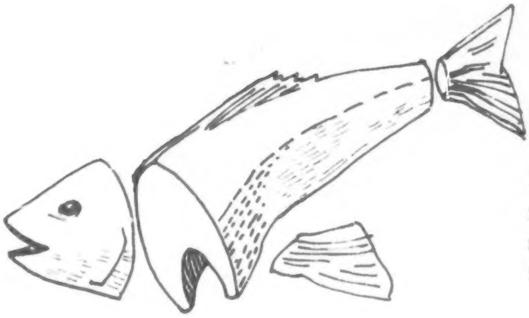
Although fish consumption is growing, at present Americans average only about 13 pounds of fish a year as against roughly 200 pounds of red meat.

Fish is easier to digest than meat and is thus included in many special diets.

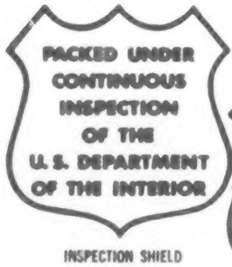


One other point should be mentioned in favor of fish: whenever the bones are eaten, as in small cooked fish, canned fish, and sardines, the bones add calcium to the diet. Calcium is the mineral most likely to be in short supply in the adult diet and the diet of anyone who does not consume much milk or hard cheese.

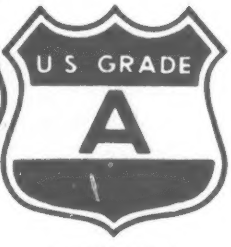
The many different varieties of fish, their excellent contribution to the diet, and the many ways they can be cooked should make them a much more popular food item than they are at present.



From the practical point of view it is interesting to note the amount of waste in a whole fish. It may reach up to 50% or more. (The amount of edible flesh of a flounder is about 47% of its total weight.)



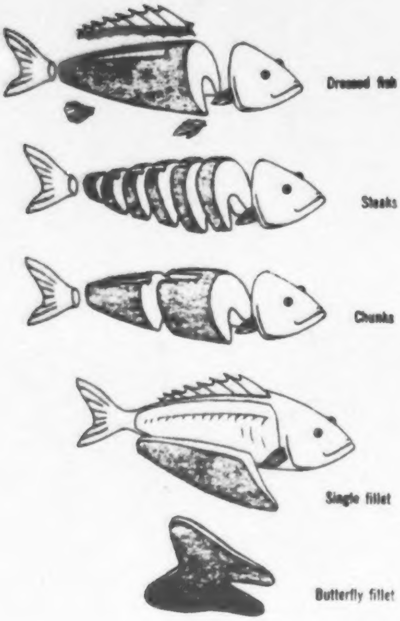
INSPECTION SHIELD



U.S. GRADE A SHIELD

Inspection and grading of fish products is available through the Bureau of Commercial Fisheries of the U.S. Department of the Interior. Inspectors will check every type of fish product, whether fresh, frozen, canned, or cured. The service is voluntary, on a fee-for-service basis.

MARKET FORMS OF FISH



Different kinds of fish can be found fresh at different periods of the year. It is wise to buy fish in season and get the benefits of a fresh product at lower cost.

Fish may be marketed as whole or round, just as they are taken from the water. Before they are cooked, they are scaled and eviscerated (insides removed).

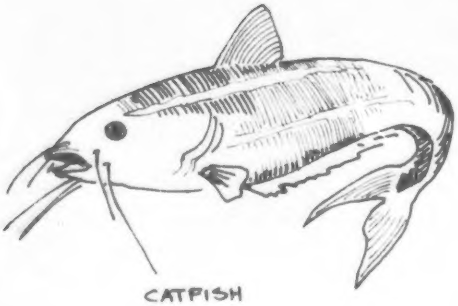
Drawn fish are fish marketed with only the entrails (insides) removed.

Dressed fish are sold ready for cooking. The head, entrails, tail, and fins have been removed and the skin scaled.

Fillets: fillets are the meaty sides of the fish removed from the backbone. According to the type of fish, the skin may be left on or removed. Fillets of larger fish may be sold cut into serving portions.

Edible fish can be divided into two main categories: the fresh-water fish and the salt-water fish.

Fresh-water fish are in general considered superior in flavor to salt-water fish, but they are not as readily available.

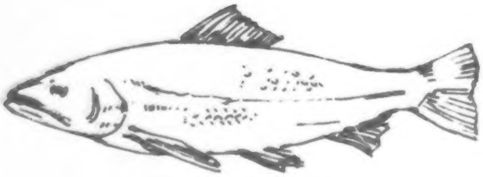


CATFISH

Fresh-water fish:

In commercial kitchens only two fresh-water fishes are in common use: trout (brook trout or rainbow trout) and smelt.

The flesh of others (perch, pike, carp) is used in the preparation of the Jewish "gefilte fish" and the French "quenelles". Catfish is a popular fish in the South, where they are grown in catfish "farms."



BROOK TROUT

Trout is a fish of the salmon family with a delicate, white or pinkish flesh.

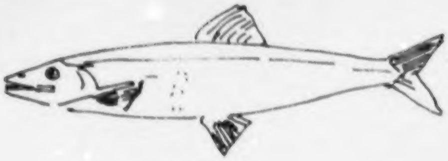
Brook trouts and rainbow trouts are found naturally in different parts of the country. The rainbow trout has a much higher fat content, and almost twice the calories of the brook trout.

I really don't need my head anymore.

Trouts are marketed whole and cooked with their heads attached. (It is interesting to note that trouts are too often served today with the head still present. This indicates a poor knowledge of proper food service. It is probably due to the fact that trouts were traditionally cooked whole *but* filleted by the waiter on a side table before being placed before the dining guest.)

Trouts are now raised commercially in trout "farms" in many countries, including ours.

Smelts: Smelts are small fish considered by many the most delicate of all fresh-water fish.


SMELT

Smelt is classified as fresh-water fish – although it lives in the sea – because it spawns in fresh water and is found far up the rivers.

Smelts are found fresh on the market in late winter and early spring. They are available frozen all year round.

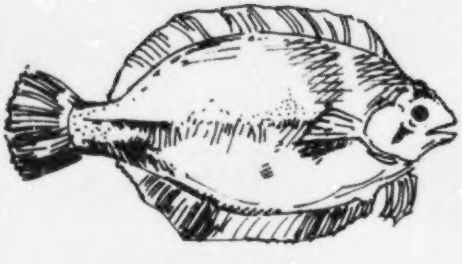
Smelts are small fish and 3, 4, or even 5 are needed to make a portion adequate for one person.

Smelts are usually eaten whole and fried. The skeleton is made of bones soft enough to eat and digest. As mentioned above, this increases their nutritional value.

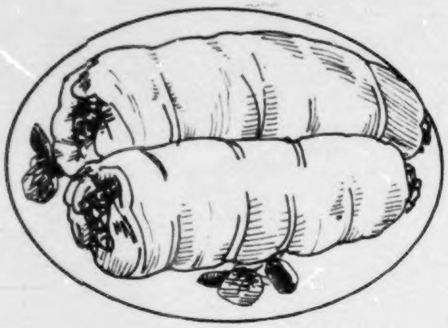
Salt-water fish

Salt-water fish are far more abundant on the market than fresh-water fish.

The list that follows includes the fish most commonly used in commercial food services. Many other salt-water fish are eaten mainly at home and thus have less interest for a commercial foods student.


FLOUNDER

Flounder: The flounder is one of the flatfishes, closely related to the turbot, halibut, sand dab, and sole. These fishes, when adult, swim on one side of their flat bodies and have both eyes on the upper side.



STUFFED FLOUNDER

Flounder is by far the most used fish in commercial kitchens.

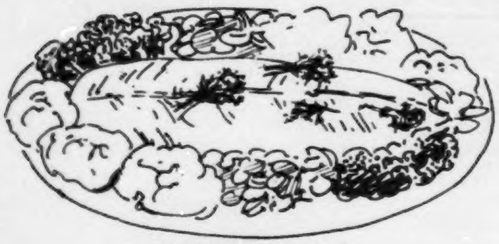
Flounders are of different varieties, but for all practical purposes can be divided into two categories: (1) the small types usually served whole – with one fish providing the right amount of food for one person – and (2) the larger fish, which have to be filleted and divided into several serving portions.

CODFISH

It should be mentioned here that the words "flounder" and "sole" are too often found on the menus of eating places actually serving a fish called fluke, which is of slightly inferior quality.

The fluke is a fish of the same family as the flounder but is much larger, weighing up to 10 pounds.

Codfish: Codfish are very abundant off the coast of Newfoundland and Massachusetts throughout the year.

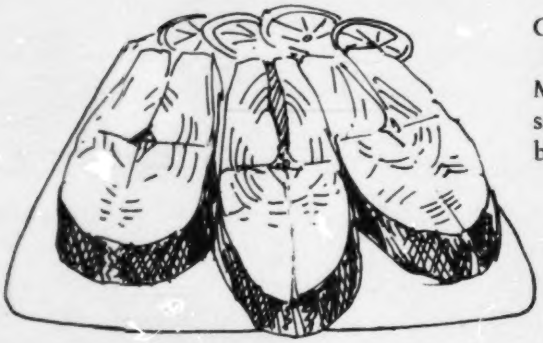


PLANKED FILLET

Codfish was one of the chief sources of food for the early colonists in New England.

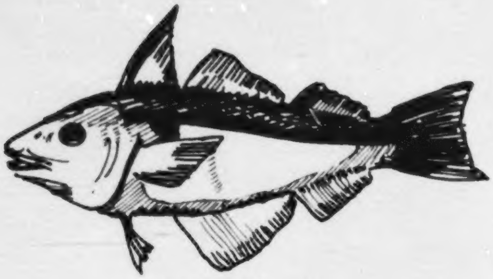
The young codfish is known as scrod and weighs from 1 to 2½ pounds.

The mature codfish weighs from 10 to 25 pounds. Fifty- and 60-pound cod are sometimes caught, and the largest on record weighed 211 pounds.



Cod is usually sold filleted, with the skin removed.

More in Europe than in the U.S.A., cod is often salted for preservation. Then it must be soaked and boiled before being used in a food preparation.



HADDOCK

Haddock: Haddock is very similar to codfish; it has very white, firm flesh and a mild, sweet flavor.

Finnan haddie is the name given to lightly smoked haddock.

Haddock is smaller than codfish, averaging about 4 pounds.

HALIBUT

Halibut: Halibut is a flat fish and could be described as a giant flounder.

The flesh of halibut is white, lean, and of a much appreciated fine flavor.

Halibut is a very large fish, weighing anywhere between 5 and 150 pounds. Individuals have been caught as heavy as 400 pounds, and the largest catch on record was 720 pounds!

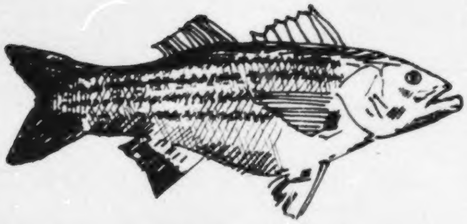
The smaller the halibut, the higher the quality of its flesh.

The flesh of the halibut is rather dry and calls for some kind of sauce to bring moisture to the dishes made of it.

SEA BASS

Sea bass: The sea bass is also called blackfish, black bass, and rock bass. They are white-meat fish weighing from ½ to 4 pounds.

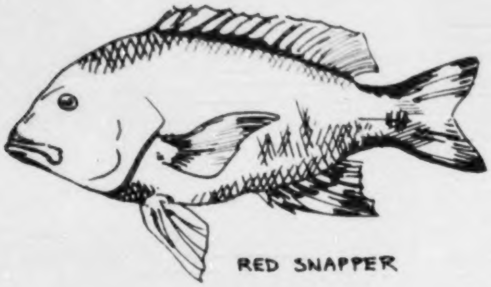
Small sea bass are often served whole like sole.



STRIPED BASS

Striped bass: The size of striped bass varies greatly – from 1 to 25 pounds; the largest catch on record was 125 pounds. The other names for the striped bass are rock bass, white bass, striper, and rockfish.

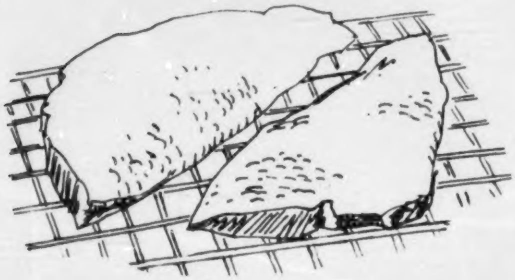
Striped bass is very popular in American commercial kitchens. They are available all year, with a peak season in May and June.



RED SNAPPER

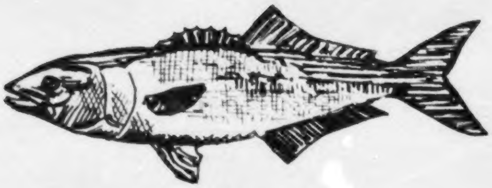
Red snapper: Red snapper is a quality fish coming from warmer waters, principally the Gulf of Mexico. It gets its name from the deep red color of its scales and fins.

Red snapper meat is white, moist, flavorful, and is considered by many one of the finest of food fishes.



Red snappers weigh an average of 7 pounds. They are rather expensive.

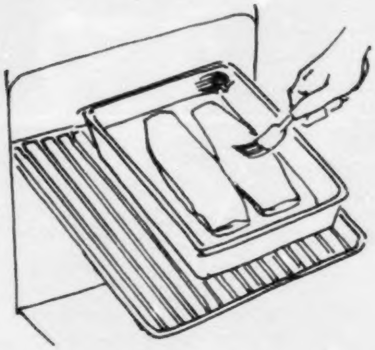
Red snappers are hard to fillet due to the strength of their bones. One should be very cautious when cleaning red snapper, because a cut or puncture made by a red snapper bone will quickly get infected if not properly taken care of.



BLUEFISH

Bluefish: Bluefish are abundant from Florida to Maine. They are available all year round, but especially from June to October in the northeastern part of the country.

Bluefish is at its best at about 4 pounds (Their weight varies from 2 to almost 20 pounds).



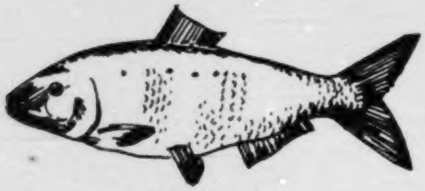
Bluefish has a good flavor but a rather soft, bluish-white flesh. It is thought by some to be rather on the "oily" side.

MACKEREL

Mackerel (Spanish mackerel) is a long, slim fish abundant all along the east coast of North and South America.

Mackerels measure from 14 to 18 inches in length and average between 1 and 2½ pounds.

Mackerel is quite a popular fish in American commercial kitchens, but some people find its rich flavor too strong.

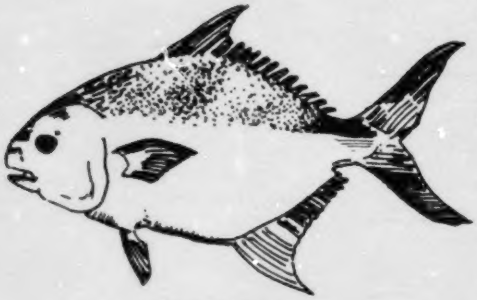


SHAD

Shad: Shad is a rather fat fish of darker flesh and extremely complex bone structure. It is served only with all its bones removed. The boning of shad is a particularly difficult task, and long experience is needed for its mastery.

Shad is also popular for the roe, found in the female. The roe from a large fish may weigh as much as 1 pound.

Shad roe is highly appreciated by gourmets and commands a rather high price on the fish market.



POMPANO

Pompano: Many regard Pompano as the best of all salt-water fish.

Pompano is found in the South Atlantic and the Gulf of Mexico.

Pompano is seldom found in the fish markets of northern states, as the entire production is usually absorbed by the demand of markets along the southern coast.

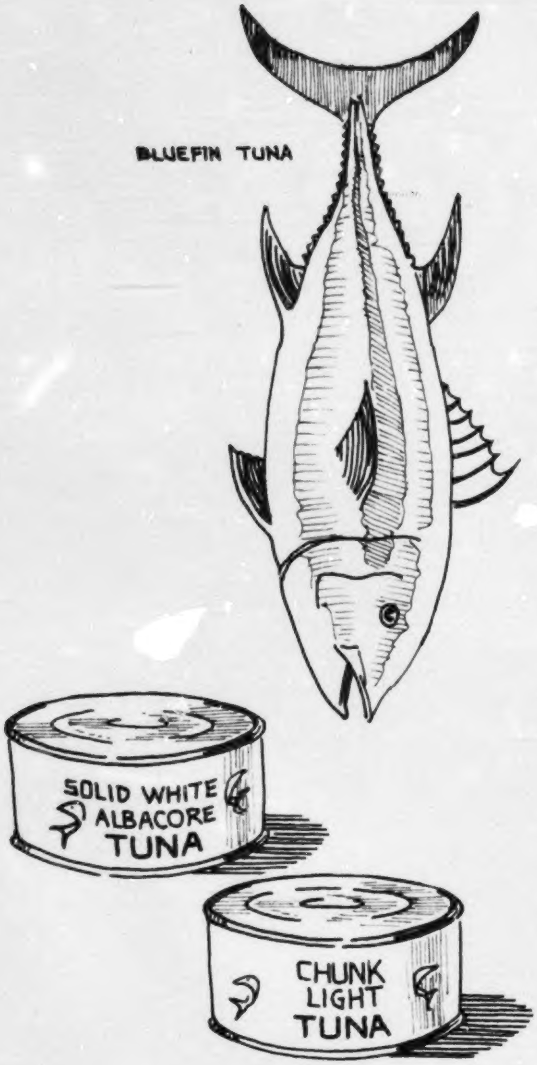
Pompano weigh from 1 to 2 pounds and are usually served whole, one to a guest, like a small flounder or sole.

SALMON

Salmon: Salmon is a rather large fish of the Pacific coast, including several different species, such as (in approximate order of quality): chinook, sockeye, coho, humpback, and chum.

The kennebec salmon of the Atlantic coast is of top-rated quality. It differs from the Pacific species in that it does not die after spawning (releasing its eggs), but lives to spawn another time.

All these different types of salmon are used in commercial kitchens and, one should admit, many chefs are not always certain of the particular species they actually handle.



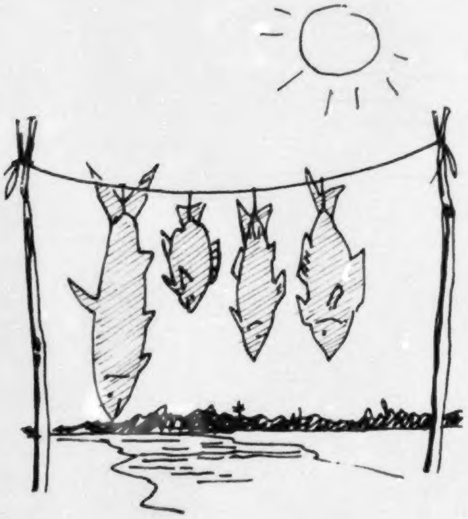
The different species of salmon vary somewhat in weight and color of the flesh, which ranges from deep red to pink. The chum salmon has a pale yellow, soft flesh.

The only salmon one is almost sure not to see in a kitchen as a fresh fish is the sockeye variety, as the entire supply of sockeye salmon is canned.

Tuna: The tuna or tunafish is found in warm and temperate waters of all seas and oceans.

Tuna is a large fish weighing up to several hundred pounds.

Tuna is seldom available fresh in the United States, which is unfortunate, for fresh tunafish is an extremely fine seafood, highly regarded by gourmets all over the world. In this country tuna is generally sold canned.



Processed fish and fish products:

An important percentage of the fish catch is reserved for processing, by smoking, salting, sun-drying, or canning.

Smoking, salting, and sun-drying were used originally to preserve the fish. These methods are employed today for the resulting flavorful products, still widely appreciated.

Finnan haddie: Finnan haddie is lightly smoked haddock fillets. It is used mostly as a breakfast food.

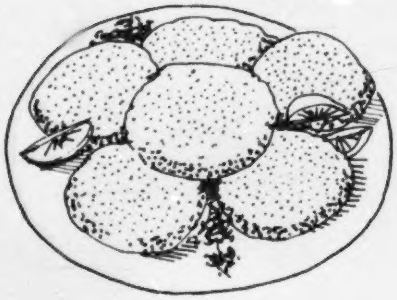
Kippered herring or **Bismark herring** is smoked, salted herring, either whole or filleted. Kippered herring is rather strong in flavor and is more appreciated in Europe than in the United States. It is usually eaten as a breakfast food.

Smoked salmon (also called **lox** from its Jewish name): Smoked salmon is quite an expensive delicacy, eaten for breakfast or in the form of canapes or hors d'oeuvres.

In the East, sandwiches of lox and cream cheese on bagel (a rather hard, doughnut-shaped roll) are popular as a luncheon dish.

Smoked whitefish is used only as an hors d'oeuvre. It is the least expensive of the smoked fishes used in commercial kitchens.

Smoked sturgeon: Smoked sturgeon is one of the most expensive smoked fishes used in hotels and restaurants. It is used for fancy hors d'oeuvres and canapes for elaborate receptions.



Salt codfish: Salt codfish is sold in fillets or shredded (called salt cod fiber). It is almost only used mixed with potato puree in the preparation of codfish cakes. These are deep-fried and generally served for breakfast.

Caviar: The word "caviar" should only be used to designate the processed, salted roe of the sturgeon. "Caviar" is too often used today for the roe of different fish, such as salmon, cod, herring, tuna, etc.

The best caviar comes from Russia and Iran and is made from the roe of the beluga, a variety of sturgeon.

Caviar is extremely expensive and is served only at the better hotels and restaurants.

Caviar appears as a mass of shiny, black, tiny little round dots held together by an oily moisture.

Quality caviar is not unduly salty. Two percent of salt is enough to act as a preservative.

Red "caviar" is becoming more and more popular because, being made of salmon eggs, it is somewhat more reasonable in price.

Caviar is served as an appetizer (an expensive one!) and on trays of assorted cold canapes. It is also used as decoration in different cold dishes (stuffed tomatoes, stuffed eggs, etc.)

Canned tuna: Canned tuna is an extremely popular food item. Two different kinds are marketed: the white tuna and light tuna.

White tuna, the best tasting and most expensive, is from the albacore species only. "Light" tuna comes from other species such as bluefin, skipjack, yellowfin, blackfin, and little tuna.

Canned tunafish is sold either in oil or water, in large chunks ("solid") or smaller pieces ("chunk," "flaked," or "grated"), the price varying accordingly.

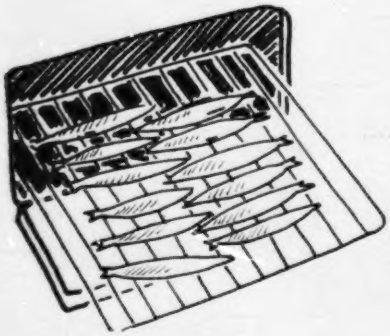
Canned tunafish is eaten either cold, usually in the form of a salad, or hot, as the main ingredient of appetizing casseroles.

Canned salmon: Canned salmon is also very much appreciated, but its rather high cost keeps it away from many family dining tables.

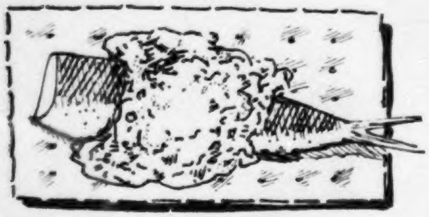
The best canned salmon is obtained from the sockeye salmon. The flesh is quite red and the oil content is high. Following in descending order of quality are: chinook or king, medium red, silver or coho, pink, chum or keta.

Canned salmon is used mostly in the preparation of salads.

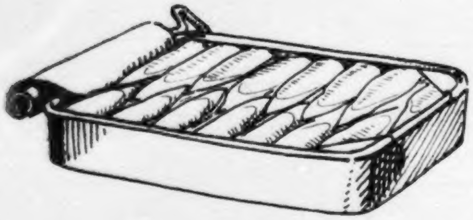
Salmon salads should be mixed gently in order to preserve as many bite-size pieces as possible. (Many inexperienced or reckless cooks wind up with a terrible mess, looking more like a cold salmon puree or a thick salmon soup!)



Canned sardines: In the United States the word "sardine" is almost always associated with "can". The fresh sardine is an excellent small fish, however. Spread with a little mustard and grilled, they rank for many (including the writer) among the best culinary treats. Unfortunately, fresh sardines are rarely found in our fresh-fish markets; they are popular, however, in the coastal regions of a few Mediterranean countries.

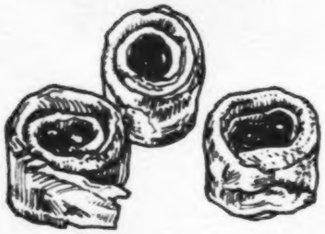


Canned sardines may be any of a number of species of small fishes, salted and smoked. They are generally eaten cold in sandwiches, as an appetizer, or among other cold canapes.



Canned sardines are sold packed in oil, tomato sauce, or mustard sauce, with or without the skin and bones.

As mentioned before, sardines with the bones are valuable for the calcium (and other food elements) they provide.

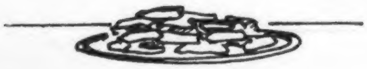


Anchovies: Anchovy fillets are the skinless fillets of a small, long fish, the anchovy. Anchovy fillets are sold in cans marinated in oil (after salting).

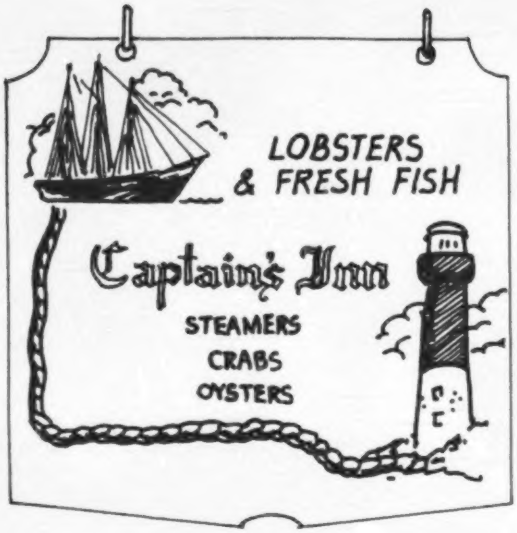
Anchovy fillets are rather salty and can only be eaten in small amounts. They are usually included in the appetizer called antipasto, consisting of small amounts of varied cold delicacies.

Marinated herring: Herring fillets are often marinated in white wine or sour cream and sold in glass jars in retail stores and in 5- or 10-pound tin cans for commercial food establishments.

Marinated herring in wine or cream is always eaten cold as an appetizer, often garnished with a few very thin rings of raw onion.



Marinated mackerel: Marinated mackerel in white wine can be found in better food stores but is not very well known in this country. It is a very popular appetizer in Europe.



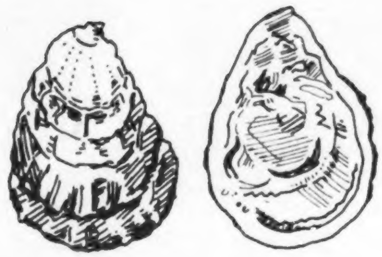
SHELLFISH

Shellfish are considered a special treat by most Americans. Particularly along the coasts of the country, restaurants specializing in shellfish and other seafoods are popular places for people who are treating themselves to "something special."

"Shellfish" includes all the seafood naturally protected by a shell. Shellfish can be divided into two main categories: the crustaceans and the mollusks.

Crustaceans are sea animals with no spinal column. Their body flesh is encased in a strong, jointed shell, and several pairs of legs are also covered by a hard, jointed shell.

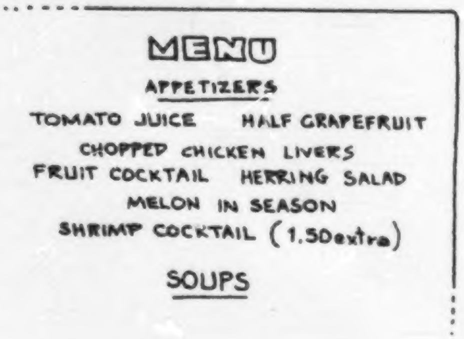
Crustaceans include: lobsters, shrimp, crayfish, and crabs.



Mollusks: Mollusks are sea animals with soft, boneless bodies enclosed in hard shells, usually consisting of two hinged parts.

Mollusks include: clams, oysters, mussels, scallops, and snails.

Shellfish is widely appreciated, and even its high cost does not curtail its popularity.


MENU

APPETIZERS

TOMATO JUICE HALF GRAPEFRUIT

CHOPPED CHICKEN LIVERS

FRUIT COCKTAIL HERRING SALAD

MELON IN SEASON

SHRIMP COCKTAIL (1.50extra)

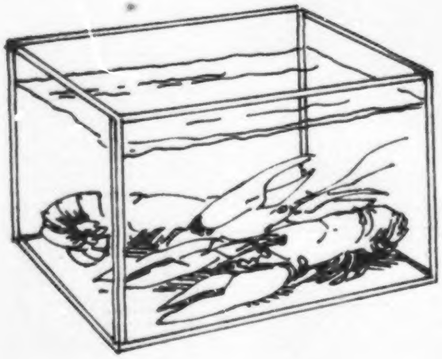
SOUPS

Virtually all commercial eating places offer some kinds of shellfish on their menus all the year round.

All shellfish is highly perishable and should be kept refrigerated at all times.

Mollusks are sold to commercial kitchens with a tag indicating their source and the date of sale.

Mollusks are harvested from tested waters only, to avoid contamination by pollution.



Shellfish are marketed in different ways.

Alive: Shellfish other than shrimp should be alive if bought in the shell and not frozen. Mollusks are alive if the shell is tightly shut or shuts tightly when tapped.

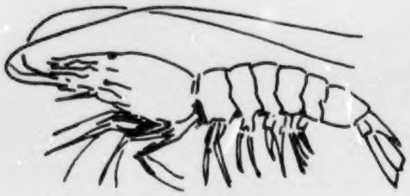
Beheaded: Shrimp are sold with heads removed, whether fresh or frozen.

Shucked and shelled: Shellfish is also marketed after shells have been removed. Clams, scallops, and oysters are often sold in this manner, fresh or frozen. Lobster meat, crab meat, and peeled and deveined shrimp are also available fresh, canned, or frozen, cooked or raw.

All seafood, whether fresh, frozen, canned, or cured, may be inspected and graded by the U.S. Department of the Interior through the Bureau of Commercial Fisheries. The service is voluntary.

Nutritionally, seafood is an excellent, low-calorie substitute for red meat. It has almost no fat, although, like all animal products, it does have cholesterol. The mollusks particularly have an unusually high iron content.

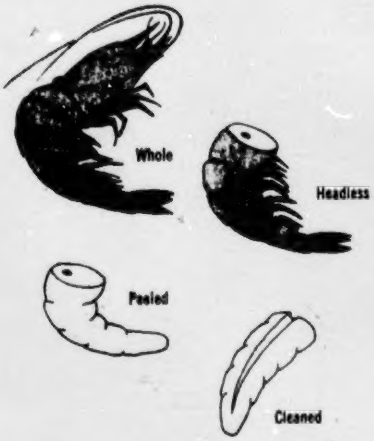
Shrimp



SHRIMP

Shrimp is the most popular member of the shellfish family. Shrimp are also called prawns in some parts of the United States.

There are several varieties of shrimp; they vary in the color of their shells when alive or raw, and sometimes in maximum size. Cooked, all have the same appetizing pink and white color and tender meat, and the same distinctive flavor.



Shrimp are always marketed with their heads and thoraxes removed, since only the tail is edible.

Shrimp are graded according to size, and the grading is expressed in number of headless shrimp to a pound. The larger the shrimp, the higher the price.

SHRIMP COCKTAIL

The usual grades of shrimp are as follows:

Under 10 (less than 10 in 1lb.)
Under 12 (less than 12 in 1lb.)
Under 15 (less than 15 in 1lb.)
15 to 20
21 to 25
26 to 30

Shrimp over 30 to a pound are very small and are not used by good restaurants, even in the preparation of hot dishes. They are, however, used for spreads or similar preparations for which the shrimp have to be ground finely.

Shrimp are always bought frozen in food service establishments.

Shrimp are usually marketed in 50-pound cases containing 10 5-pound packs.

Shrimp are also available in plastic bags holding different amounts of individually quick-frozen shrimp. This form has the advantage of faster thawing.

Shrimp are sold raw (peeled or unpeeled), cooked – peeled and deveined (the black intestine or sand vein removed from the back), and peeled, cleaned, and breaded ready for deep frying.

Cooked shrimp should be cooled rapidly and refrigerated immediately.

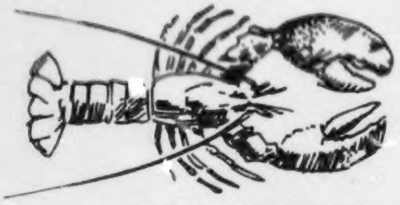
Shrimp are cooked in commercial kitchens by the use of a pressure cooker or steamer.

The best way of cooking shrimp is by boiling in water seasoned with different ingredients, called a court bouillon. For economical reasons – labor cost, food cost, etc. – this method is now seldom employed.

Lobster

Lobster is considered by many as the most luxurious seafood . . . for its incomparable taste by the gourmets, and for its price by all others.

Lobsters are divided into two main categories: the cold-water lobster and the warm-water lobster, also called spiny lobster or rock lobster .


COLD WATER LOBSTER

The cold-water lobster is by far the most known and most appreciated.

Cold-water lobster comes mainly from the North Atlantic; Maine lobsters have a wide and well-deserved reputation.

Cold-water lobsters are always sold alive, usually in large wooden barrels packed with ice bits and closed with a jute covering. A live lobster, when picked up, will curl its "tail" up under its body.

Cold-water lobsters are sold in four sizes:

Chicken: ¾ to 1 lb.
Quarters: 1¼ to 1½ lb.
Large: 1½ to 2½ lb.
Jumbo: Over 2½ lb.

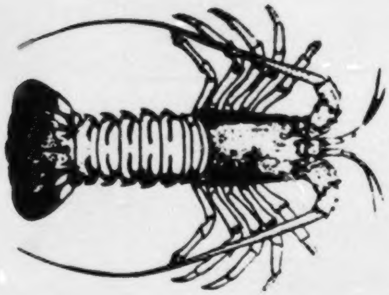
With the exception of the shell, of course, and a small part inside the head called the "sand bag", the whole lobster is edible.

LOBSTER NEWBURG

Lobsters are checked every day in commercial kitchens, and the ones showing signs of dying are removed and cooked immediately by boiling or steaming. Their meat is later used in the preparation of different cold and hot dishes.

Broiled lobsters require the utmost attention from the broiler cook. It is obvious that a burnt lobster means the loss of quite a few dollars for the business. Two burnt lobsters would probably mean the loss of a job for the broiler cook.

The two claws of a lobster are of different shape and appearance. One is more husky and more powerful. The two hinged parts are usually kept closed by the use of a wide rubber band or the insertion of a small wood wedge in the joint. A "lively" lobster can inflict a serious bruise on a finger by pinching it in its big claw. The other claw is more slender and also weaker. The inside part of the claw is lined with fine teeth, which are more impressive than harmful, the whole claw being relatively weak.

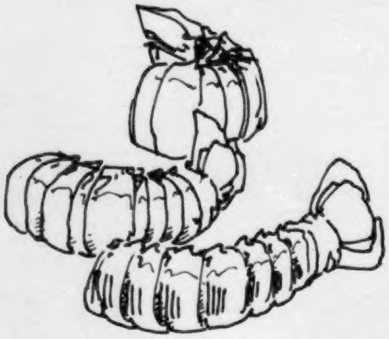


Spiny lobster or rock lobster

The spiny lobster is found in all the warmer waters of the Atlantic, Pacific, and Indian Oceans.

The flesh of spiny lobster is coarser and less delicate in flavor than the flesh of cold-water lobster.

Spiny lobsters are sold alive only in the immediate area where the boats dock.



Commercially, the tails are cut from the body and immediately frozen.

The weight of a spiny lobster tail varies from 3 or 4 ounces to around one pound.

Lobster meat is perhaps the most appreciated seafood. Unfortunately its high cost makes it a dish that only the few can enjoy.

OYSTER

Mollusks

Four different mollusks are eaten in the United States: oysters, clams, scallops, and mussels.

SCALLOP

Mussels are the least popular of the four, partly due to the fact that they do not ship well and are not readily available everywhere.

CLAM

MUSSEL

ok JANUARY
ok FEBRUARY
ok MARCH
ok APRIL
ok MAY
ok JUNE
ok JULY
ok AUGUST
ok SEPTEMBER
ok OCTOBER
ok NOVEMBER
ok DECEMBER

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

It is often said that oysters, clams, and mussels should not be eaten during the warm months or, as the saying goes, the months without an "R" in their spelling (May, June, July, and August). This belief is erroneous and may be the result of a French royal decree issued in 1754, prohibiting the gathering of oysters during these months, to protect the oyster beds from being depleted – since these are the months when oysters spawn (produce eggs). As a matter of fact, these mollusks do not have their highest eating quality during these months.

Oysters: Oysters are found almost everywhere in the world.

Oysters form large beds in warm waters from the tidal zone to a depth of 80 to 100 feet.

Oysters are of more than 50 different varieties, but only two are commonly eaten in the United States: the small Blue Point oyster and the larger Cape Cod oyster.

Oysters are today produced in oyster "farms," where they are grown scientifically in an artifically created, suitable environment.

A live oyster is tightly closed. An oyster with its shell parted is dead and must not be eaten.

Oysters are sold either in the shell or shucked.

Shucked oysters are used for cooking only.

Oysters served on the half shell as an appetizer should be opened shortly before serving, for their appearance and eating quality will suffer rapidly after being opened.

SOFT-SHELLED CLAMS

Clams: Different varieties of clams are found on the market according to location. The clams from west-coast waters are different from the clams found in east-coast waters.

The three different types of clams found on the East Coast are the soft-shell clam, the hard-shell clam, and the surf clam.

The soft-shell clam, also called long-neck clam, is found from Cape Cod to the Arctic Ocean. It is very popular in New England and is mostly eaten steamed.

The hard-shell clam is by far the most widely used in commercial kitchens. It is found south of New England. It is often called quahog (an Indian name for clam) rather than clam by New Englanders.

HARD-SHELLED CLAMS

Hard-shell clams are known in the trade as littlenecks when they are very small, cherrystones when a little bigger, and chowders when of the largest size.

CLAMS ON THE HALF SHELL

Littlenecks have shells about the size of a silver dollar; they are eaten on the half shell as an appetizer.

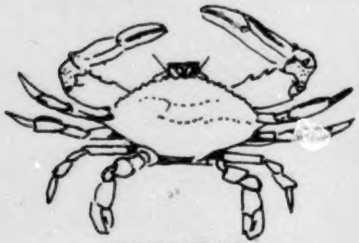
Cherrystones average 1½ inches in diameter. They are also eaten raw as an appetizer, or breaded and fried whole.

CLAM CHOWDER

Chowders are much larger than the cherrystones and are used mainly in soups and chowders. They are usually diced or ground and cooked for some time, since chowder clams are rather tough.

Surf clams are usually gritty, and are used mostly for clam juice and clam broth.

Crabs



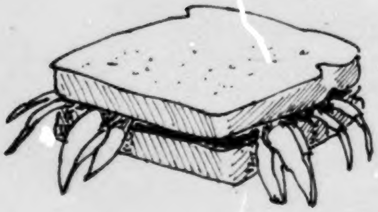
BLUE CRAB

Among the many varieties of crabs found in the world, four species are found on the American market: the blue crab, the Dungeness crab, the king crab, and the rock crab.

The **blue crab** is found on the Atlantic Coast and represents 80% of the total crab consumption in the United States.

The blue crab shell is about 5 inches across, and the crab weighs approximately 5 ounces at maturity.

A soft-shell crab is a blue crab caught and sold at the molting season, when the crab has shed its old, hard shell but the new shell has not yet hardened.



Soft-shell crabs are sold alive in special crates loaded with seagrass to insure their survival during shipment.

Dressed soft-shell crabs are also available frozen, ready for cooking.

Hard-shell crabs do not ship well and are sold alive only at markets located near the point of capture.

Most hard-shell crabs are processed immediately after being caught and are marketed in the frozen or canned form.

Crab meat spoils very rapidly when kept at room temperature. Crab meat should always be kept on ice when served at buffets.

DUNGENESS CRAB

Dungeness crabs are found on the Pacific Coast from Alaska to Mexico and weigh from 2 to 4 pounds.

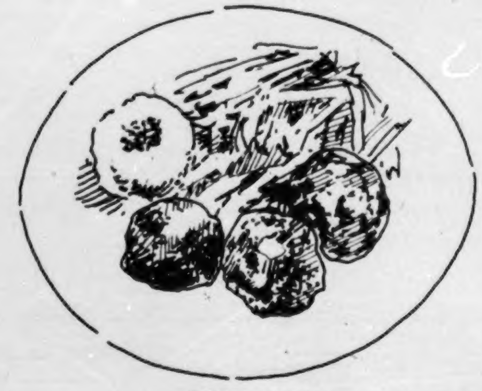
Dungeness crab meat from the body is white, and the claw meat has a brownish-red tint on the outside. Most of it is marketed cooked, either frozen or canned.

KING CRAB

King crabs come from the Pacific Coast off Alaska.

King crabs are very large, reaching a 6-foot leg span and weighing up to 20 pounds.

King crabmeat is mostly leg meat. It is white with a reddish tint on the outside. Much of it is marketed cooked and frozen or cooked and canned. King crab legs are sometimes sold in their shells, cooked and frozen.


CRAB CAKES

Crabmeat of all kinds is a very popular food in the United States and figures on the menus of practically all good eating places in one form or another: cold as an appetizer, cold in salads, hot in casserole dishes, sauteed, and, mixed with other ingredients, as the ever popular crabmeat cake.

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